Installation & Maintenance Manual

MONTIGO®
the art of fireplaces
www.montigo.com

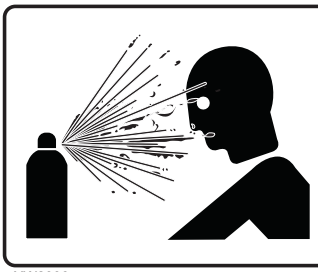
R320 Indoor
R420 Indoor

R-Series Residential Fireplace

DANGER

Read and understand this manual. Improper installation, adjustment, alteration, service or maintenance can cause serious injury, property damage or even death. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

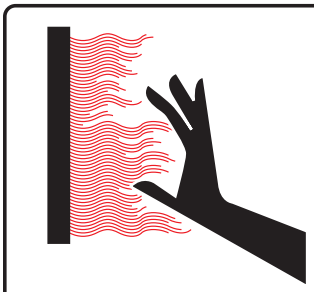
XW2002



WARNING

Do not store or use gasoline or any other flammable vapors and liquids in the vicinity of this or any other gas burning appliance. A fire or explosion my occur causing serious injury, property damage or even death.

XW2006



CAUTION

Glass doors on gas fireplaces are **extremely hot** while the fireplace is on and remain hot even after the fireplace has been turned off. Safety screens are available and can reduce the risks of severe burns. Please keep children away from the fireplace at all times.

XW2004

NOTICE

Installer: Leave this manual with the appliance. Do not remove.
Consumer: Retain this manual for maintenance and future reference. Do not Discard.

XW2012

NOTICE

IF YOU SMELL GAS

⚠ Do not try to light any appliance.
⚠ Do not touch any electrical switch; do not use any phone in your building.
⚠ Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
⚠ If you cannot reach your gas supplier, call the fire department.

XW2014

NOTICE

You must read and understand this manual prior to installation, operation or troubleshooting this appliance. Please retain this owner's manual for furure reference and maintenance.

XW2010

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Safety Alert Key

⚠ DANGER

Indicates a hazardous situation which, if not avoided, WILL result in death or serious injury or property damage.

⚠ WARNING

Indicates a hazardous situation which, if not avoided, COULD result in death or serious injury or property damage.

⚠ CAUTION

Indicates a hazardous situation which, if not avoided, WILL result in minor or moderate injury.

NOTICE

Address practices that are important, but not related to personal injury

Introduction

INTRODUCTION

Congratulations on your purchase of a **Montigo Fireplace**.

With over 30 years of experience, Montigo is committed to providing you with a gas fireplace that is not only a beautiful addition to your space, but that is also designed and manufactured to the highest safety, reliability and engineering standards.

We strongly encourage you to read and carefully follow the instructions laid out in this Installation, Operation and Maintenance Manual and retain it for your future reference. Pay special attention to all cautions, warnings, and notices throughout this manual intended to ensure your safety.

This manual covers installation, operation and maintenance. Lighting, operation and care of this fireplace can be easily performed by the homeowner. All installation and service work should be performed by a qualified or licensed installer, plumber or gas fitter as certified by the state, province, region or governing body where the fireplace is being installed.

This installation, operation and maintenance manual is applicable to the models described below. Refer to your rating plate to verify included options.

Warranty and Installation Information: (See Appendix B)

The Montigo warranty will be voided by, and Montigo disclaims any responsibility for, the following actions:

► Modification of the fireplace and/or components including Direct-Vent assembly or glass doors.

► Use of any component part not manufactured or approved by Montigo in combination with this Montigo fireplace system.

► Installation other than as instructed in this manual.

Consult your local Gas Inspection Branch on installation requirements for factory-built gas fireplaces. Installation & repairs should be done by a qualified contractor.

⚠WARNING

Hot glass will cause burns. **Do not touch** glass until unit is cooled. **Never** allow children to touch glass.

Fireplace BTU/H Input

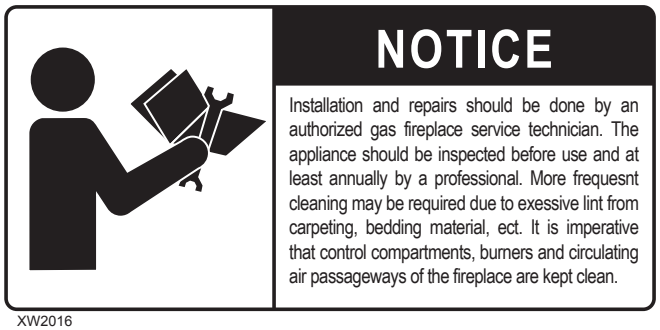
Model#	Natural Gas	Propane	Venting Type	Burner Type	Ignition Type
R-Series R320	50,000	40,000	Top Dedicated Power Vent	Linear Burner	SIT Electronic Ignition (IPI)
R-Series R420	65,000	55,000	Top Dedicated Power Vent	Linear Burner	SIT Electronic Ignition (IPI)

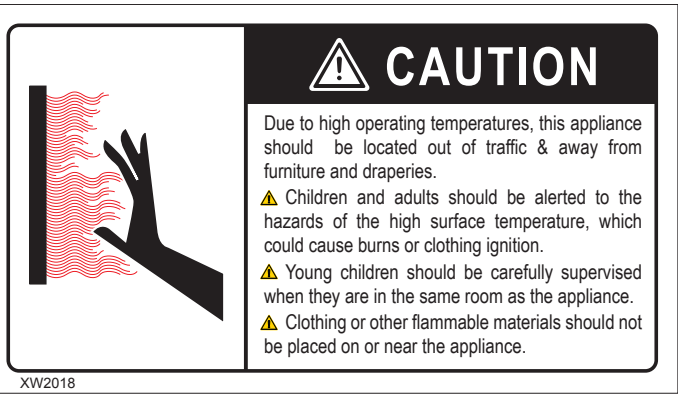
Installation

Section:A: Before You Begin

Important Message Save these Instructions

The R-Series Residential R320 & R420 Power Vent fireplaces must be installed in accordance with these Instructions. Carefully read all the Instructions in this manual first. Consult the Local Gas Branch to determine the need for a permit prior to starting the installation. It is the responsibility of the installer to ensure this fireplace is installed in compliance with the manufacturers instructions and all applicable codes.


NOTICE
Installation and repairs should be done by an authorized gas fireplace service technician. The appliance should be inspected before use and at least annually by a professional. More frequesnt cleaning may be required due to exessive lint from carpeting, bedding material, ect. It is imperative that control compartments, burners and circulating air passageways of the fireplace are kept clean.
XW2016


CAUTION
Due to high operating temperatures, this appliance should be located out of traffic & away from furniture and draperies.
Children and adults should be alerted to the hazards of the high surface temperature, which could cause burns or clothing ignition.
Young children should be carefully supervised when they are in the same room as the appliance.
Clothing or other flammable materials should not be placed on or near the appliance.
XW2018

DANGER
When this appliance is installed directly on any combustible material other than wood flooring, it must be installed on a metal or wood panel extending the full width and depth of the appliance or a fire will occur causing serious injury, property damage or even death.
XW2020

BEFORE YOU START:

Pre-Installation Checklist

- Determine the desired install location of your fireplace.
- See Section 1, Dimensions on Page 5, and refer to the Framing Section 2 for details.
- Select your type and location of your Power Vent run: Roof Mounted (EDVRSPV58) or Wall Mounted (EDVWSPV58).
- Your termination location should be selected to provide the shortest possible vent run.
- Lay out the Vent run; calculating the required elbows and straight runs of 5"/8" flex or rigid pipe.
- Refer to the Section 3, "Installing the Power Vent" for details.
- The electrical panel is located on the lower right side when facing the fireplace.
- Montigo supplies 20' of low voltage wire, which can be spliced to any length. This wire CANNOT run in conduit with any other wire.
- Refer to Section 4, Wiring for Details.
- The gas connection is located on the lower end when facing the fireplace.
- Refer to local codes and guidelines for installation requirements.
- Installation and repairs should be done by a qualified contractor and must conform to:
  - **Installations in Canada** must conform to the current CAN/CGA B-149.1 and .2 Gas Installation Code and local regulations.
  - **Installations in the USA** must conform to local codes, or in the absence of local codes to the National Fuel Gas Code, ANSI Z223.1-1988.
  - **See Appendix C for installation within the State of Massachusetts.** This fireplace must comply with NFPA-54 Chapter 10.
- Refer to Section 5, "Installing the Gas Line" for Details.

Understanding the Basic Operation

Residential R320 & R420 fireplace

The control compartment of this fireplace is located in the bottom of the fireplace right below the burner system. All models will be supplied with a Honeywell smart valve gas control and will not have a variable flame control. There are two air switches that are controlling the gas control system, and are located in the bottom of this fireplace. These gas valves, and pressure switches communicate with the electrical control panel via a six conductor cable supplied with the fireplace.

To operate the fireplace, Montigo has supplied and installed twenty feet of low voltage wire to this electrical control panel. Connect the two wire harness to a standard single pole ON/Off switch located at a location of your choice. You may also extent these wires to any length, as long as you select a wire of equal quality.

Installation

Section 1: Installation Overview and Product Dimensions

WARNING

The C-View Residential **R320** & **R420** are power vented fireplace systems. Under no circumstances can these model(s) be installed without a power vent module.

For regular Horizontal vent installation use 5"/8" model **EDVWSPV58** with the rough-in kit, **EDVWSPV58F** for the **R320** & **R420.**

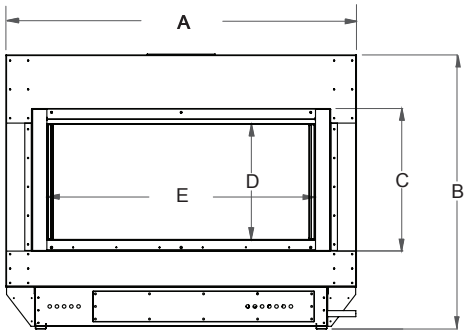
For regular Vertical vent installation use 5"/8" model **EDVRSPV58** with the rough-in kit, **EDVRSPV58F** for the **R320** & **R420**.

⚠ DANGER

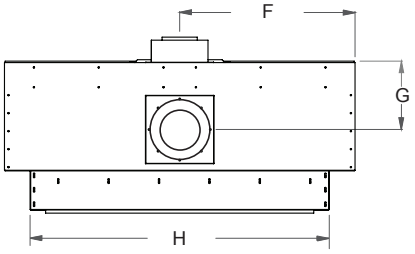
When this appliance is installed directly on any combustible material other than wood flooring, it must be installed on a metal or wood panel extending the full width and depth of the appliance or a fire will occur causing serious injury, property damage or even death.

Dimensions

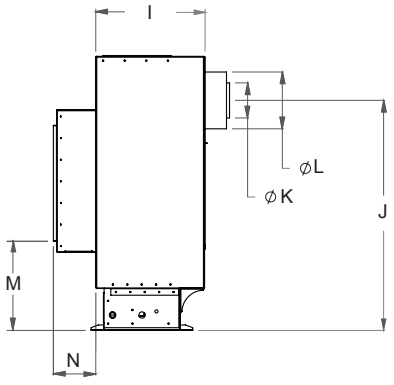
The fireplace dimensions are shown below and on the following page:



Front View



Top View



Side View

Unit Dimensions														
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
R-Series R320	48 11/16"	38 1/16"	19¾"	16⅛"	37¼"	24 5/16"	9½"	41 9/16"	15 3/16"	31 15/16"	5"	8"	12⅝"	5⅞"
R-Series R420	60 11/16"	38 1/16"	19¾"	16⅛"	49¼"	30 5/16"	9½"	53 9/16"	15 3/16"	31 15/16"	5"	8"	12⅝"	5⅞"

Figure 1. R-Series Residential Fireplace dimensions.

Clearances

To ensure the **R-Series Residential** Fireplace operates safely, all models must maintain the following clearances.

	R320	R420
Top - Rear Vent *	10"	10"
Top - Top Vent	10"	10"
Back	2"	2"
Sides	3"	3"
Floor	0"	0"
Mantel **	6"	6"

* See Instructions on ***page 4, (figure 1a)***

** See Instructions on ***page 16, (Mantels & Surrounds)***

Unprotected combustible walls which are perpendicular to the fireplace opening, must not be closer to the fireplace than the described in ***Figure 16***.

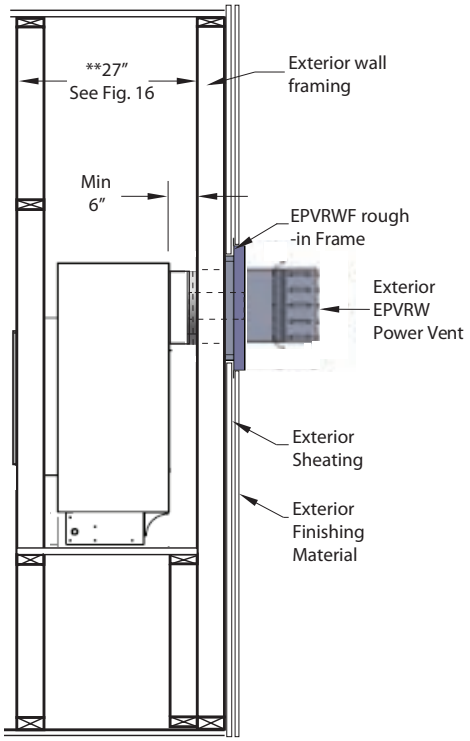


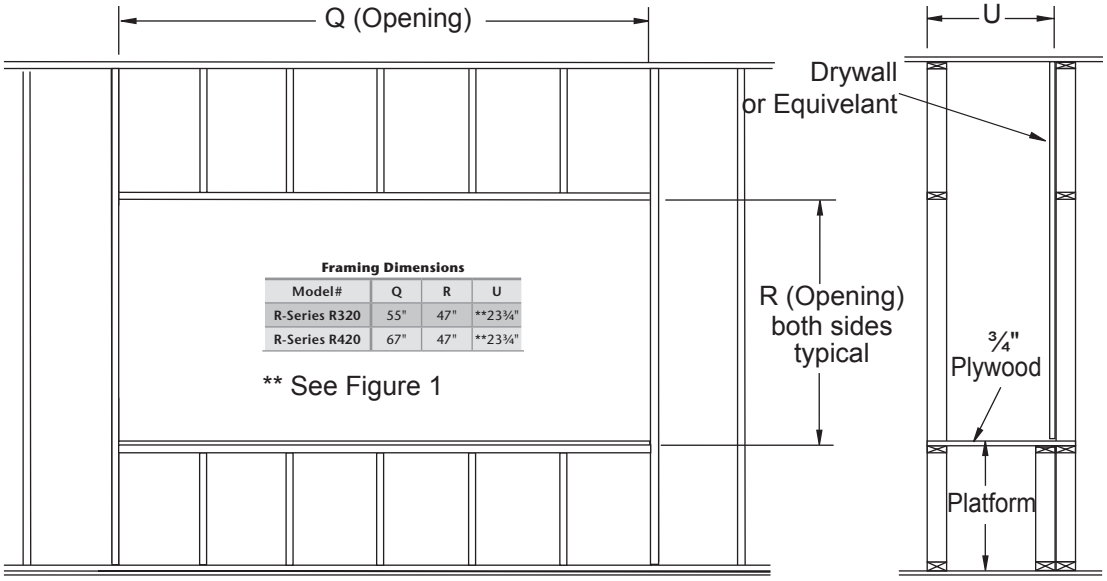
Figure 1a. R-Series Residential Rear clearance dimensions.

Installation

Section:2: Framing

Step 1. To ensure your glass viewing area is at the optimum height, follow the Example below, Figure 2. Example: If you wish to have the bottom edge of the glass to be 24", the top of the platform will be 8 7/8", (24"- 15 1/8" = 8 7/8").

This dimension takes in account the height of the platform, plywood and adequate clearances.



Model#	Q	R	U
R-Series R320	55"	47"	**23¾"
R-Series R420	67"	47"	**23¾"

Figure 2. Fireplace installation, (Rough Frame-In dimensions) Both Sides are Typical.

Step 2. Place the Fireplace on the platform and install the Vent pipe, and Power Vent module. (Install the module in a location where it can be accessed when the surround is installed around the fireplace). Next, Connect the Gas line, and provide a gas service shut-off valve; according to local gas codes. Before fastening in place Line up the front face and rear face of the fireplace (top and bottom), Figure 2a. then secure in place with 1/4" wood screws.

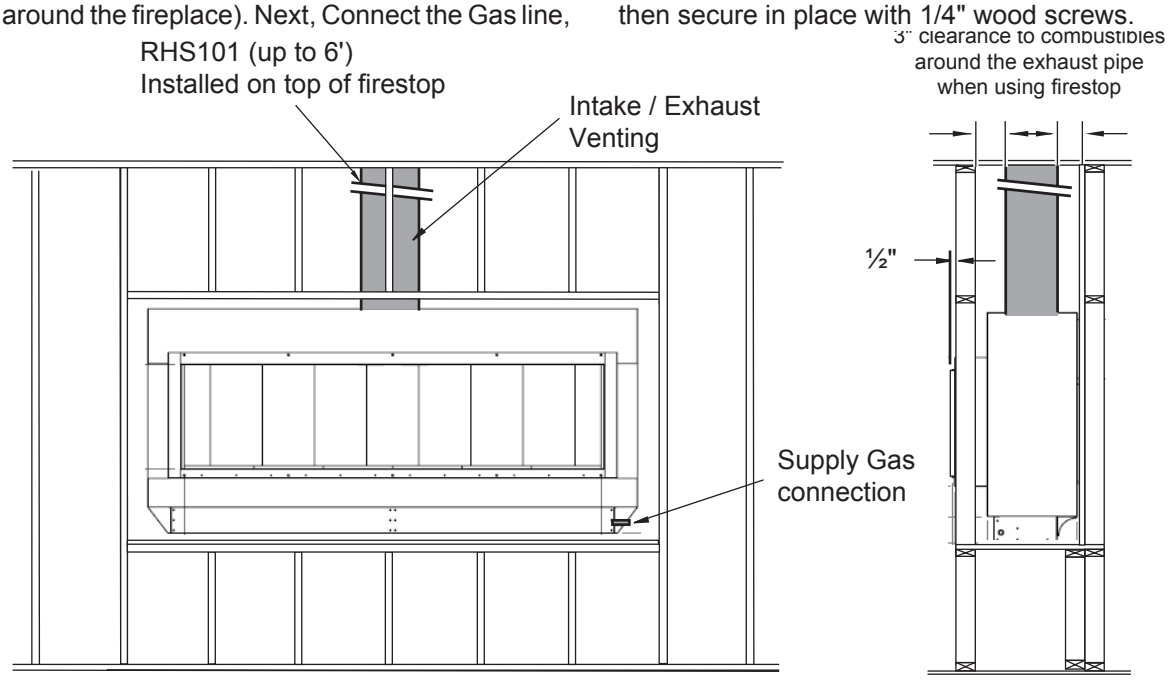


Figure 2a. Fireplace installation, (Inlet Gas & Power Vent) .

Step 3. Back-framing the Fireplace; installing 2 x 4's, (Typical Both sides).

Ensure you have the required 2 x 4's to complete the project. Cut Two (2) - 2 x 4's to fit under the front & rear fireplace throat, (horizontal), fit & remove. Next, cut the short 2 x 4's, to fit at each end under the previous Horizontals'. *(Note: when these pieces are secured into place there should be the required 1" clearance to combustibles)*, Figure 2b.

Installation

NOTE: Remember, both sides of the Fireplace require the same quantities of wood, drywall and hardware.

Cut the Upper and Lower Horizontal 2 x 4's in accordance with Figure 2b. Next, cut the Required quantity of short filler 2x4's under the lower Horizontal. The number of pieces will be determined by the length, and model of fireplace. (Follow Typical building codes and practices when spacing).

Next, cut the Required Left and Right Vertical 2 x 4's in accordance with Figure 2b.

Lastly, install the Two (2) Supplied Steel Headers 1" above the fireplace throats. **NOTE: When this assembly is in place, ensure ALL the required 1" clearance to combustibles are maintained.**

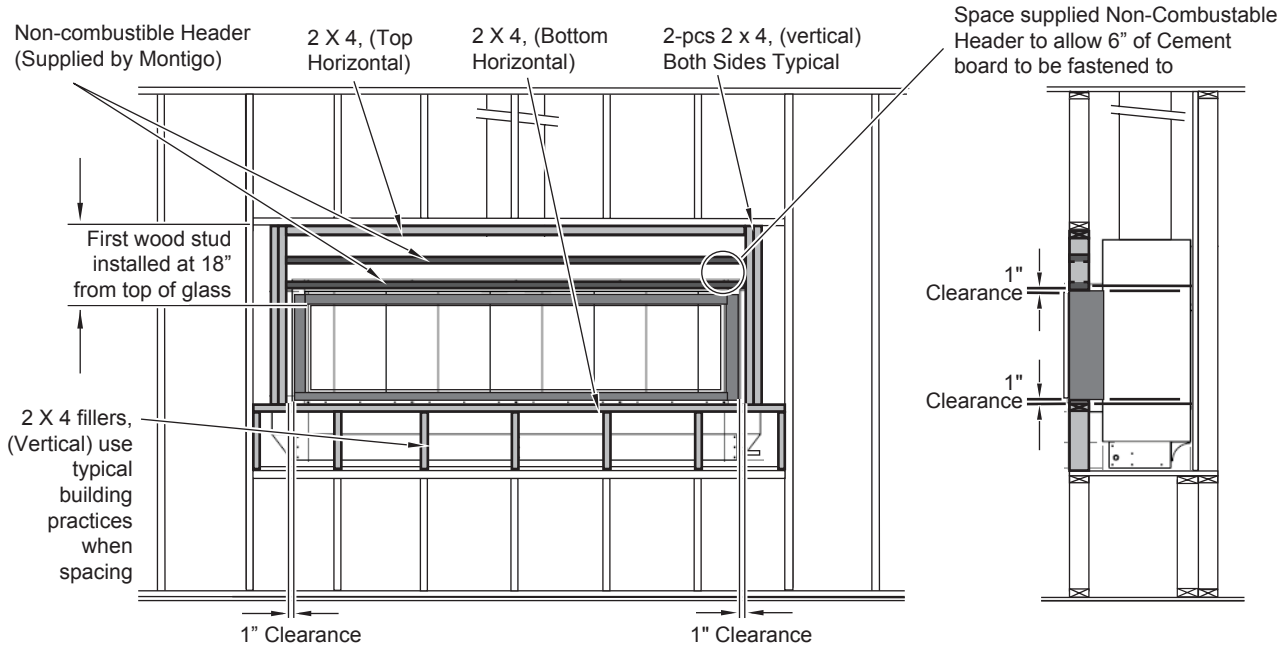

Non-combustible Header (Supplied by Montigo)
2 X 4, (Top Horizontal)
2 X 4, (Bottom Horizontal)
2-pcs 2 x 4, (vertical) Both Sides Typical
Space supplied Non-Combustable Header to allow 6" of Cement board to be fastened to
First wood stud installed at 18" from top of glass
2 X 4 fillers, (Vertical) use typical building practices when spacing
1" Clearance
1" Clearance
1" Clearance
1" Clearance

Figure 2b. Fireplace installation, (Ensure you maintain the 1" clearance to combustibles) Both Sides are Typical.

Step 4. As shown in Figure 2c; Cut a sheet of Non-combustible Concrete Board to overlap the new 2 x 4's and Non-combustible Header (front & rear face) See Figure 2b. Place the Non-combustible wall board above the fireplace throats, allowing 1/8" clearance from the rim above the fireplace opening. Pre-drill pilot holes in the board with ⅛" drill, secure to wood framing with Nails and use flat heat sheet metal screws to fasten the board to the metal header.

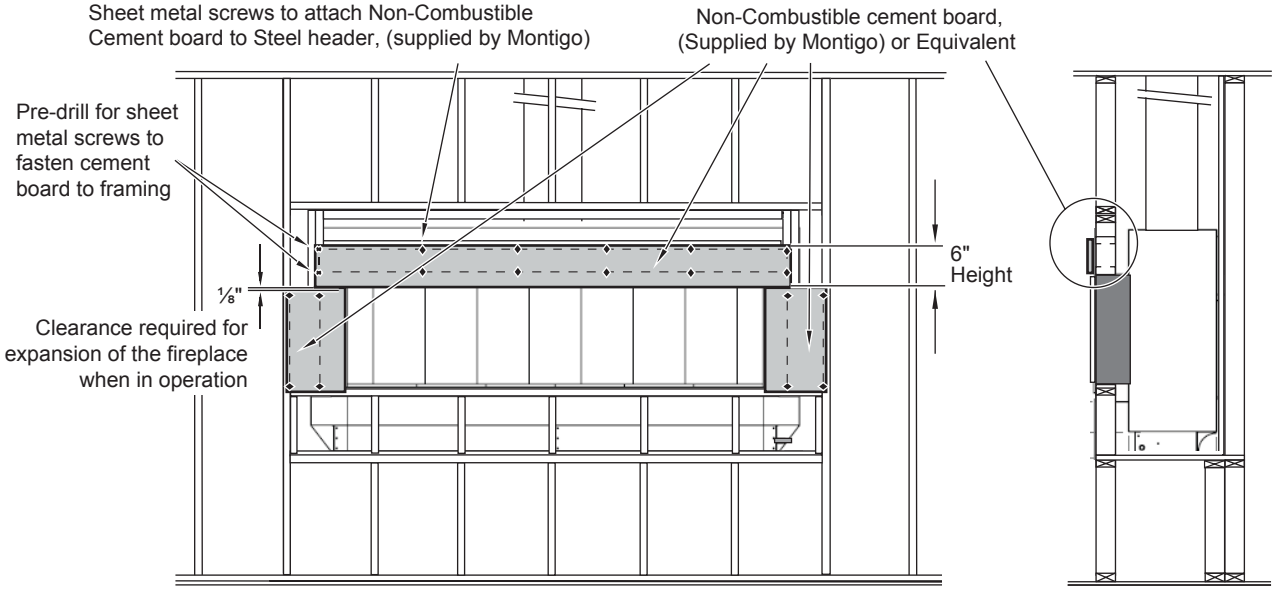

Sheet metal screws to attach Non-Combustible Cement board to Steel header, (supplied by Montigo)
Non-Combustible cement board, (Supplied by Montigo) or Equivalent
Pre-drill for sheet metal screws to fasten cement board to framing
⅛"
Clearance required for expansion of the fireplace when in operation
6" Height

Figure 2c. Non-combustible Board over the Fireplace, (supplied by Montigo) Both Sides are Typical.

Installation

Step 5. As shown in Figure 2d; Cut standard Gyproc / Drywall board to complete the installation of Both surrounds. Fit the edges of the board to the rim around both fireplace openings. Fasten the boards in place using standard drywall screws.

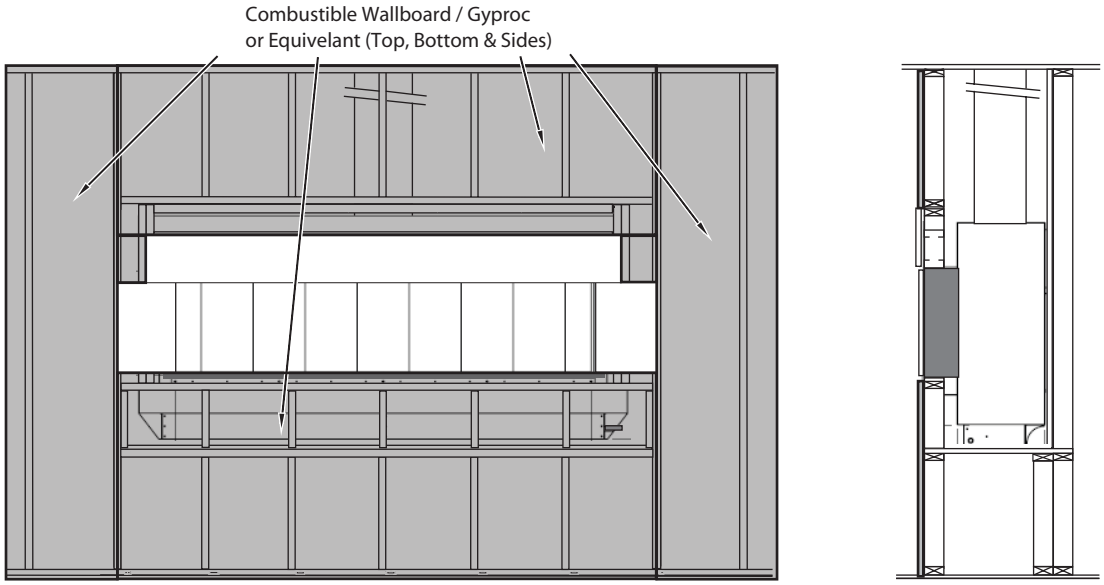


Figure 2d. Fireplace installation (Cut the remainder of Gyproc / Wall board to complete the fireplace surrounds) Both Sides are Typical.

As shown in Figure 2c; Pre-drill the Non-combustible Cement Board with an 1/8" drill, secure to framing with Nails and use flat heat sheet metal screws to fasten the board to the metal header.

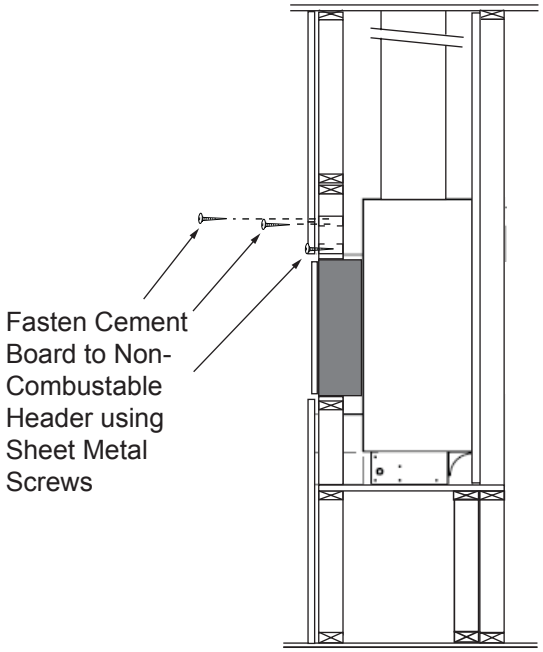


Figure 2e. Fireplace installation (Pre drill pilot holes with 1/8" drill and attach Cement Board to Non-combustible Header using Sheet metal Screws). Both Sides are Typical.

Installation

Montigo supplies a variety of power venting options. The location of the power vent should be selected and laid out to provide the shortest possible run to an external wall or through the roof. In the event that the external power vent is not aesthetically acceptable or otherwise infeasible, an in-line power vent can be utilized.

Section 3-1: Installing a Roof Mounted Vertical Exterior Power Vent (EDVRSPV58)

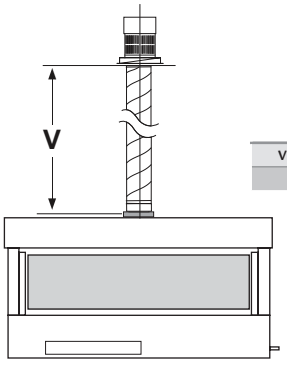
This section applies to installations where the shortest possible vent run is through the roof. Refer to **Appendix A - Power Vent locations**, to ensure the planned Power vent location is acceptable. Once the vent location has been established, please refer to the appropriate section below for installation details.

Section 3-1-1: Venting Layout

Straight Venting Layout

Selection of components and details of venting lay out should adhere to the following guidelines:

- Ensure there is a minimum run of 2' of straight pipe before the power vent
- Ensure the maximum vent run does not exceed 80'
- Ensure the number of 90° elbows does not exceed 6
- Ensure the number of 45° elbows does not exceed 12



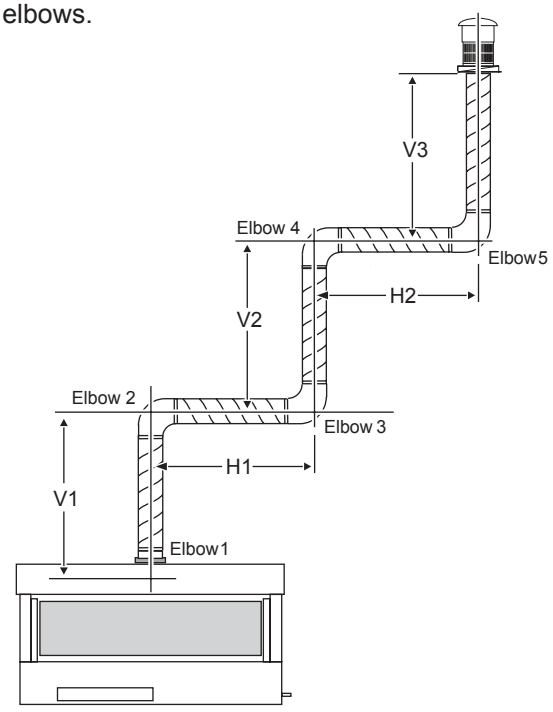
Venting Installation

V (Maximum Length)	Max. # Elbows	Elbow Angle
80 Feet	6	90°

Figure 3. Typical straight Venting Installations.

Multi-Elbow Installations

Multi-elbow installations are possible up to a maximum of six 90° elbows.



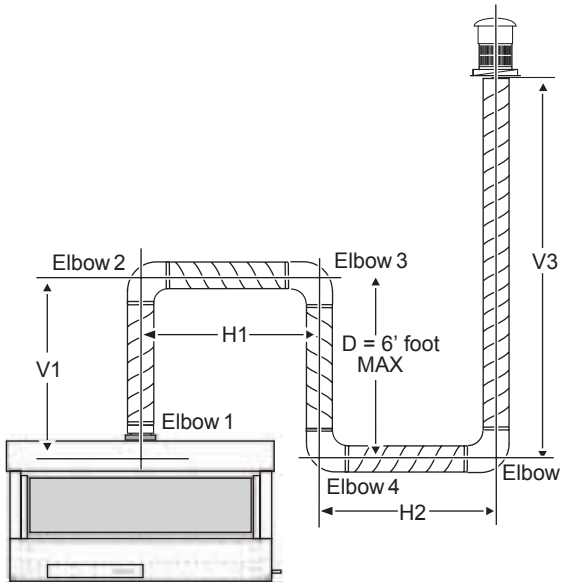
Multi Elbow - Venting Installation

V1 + H1 + V2 + H2 + V3 (Maximum Length)	Max. # Elbows	Elbow Angle
80 Feet	6	90°

Figure 3a. Multi-elbow Venting Installations.

Downward Vertical Venting

Note: The downward vent run must not exceed 6' of vent run.



Multi Elbow - Venting Installation

V1 + H1 + V2 + H2 + V3 (Maximum Length)	Max. # Elbows	Elbow Angle
40 Feet	6	90°

Figure 3b. Downward Venting Installations.

Installation

Section 3-1-2: Venting Components

The following venting components and associated Montigo part numbers are available for the EDVRSPV58:

A - Termination	EDVRSPV58
B - Rough-in Frame	EDVRSPV58F
C - Flex Sections	PFL-1 (12" Section) PFL-2 (24" Section) PFL-3 (36" Section) PFL-4 (48" Section)
D - Rigid Sections	PEXT - 1 (12" m/f Section) PXT-20 (20" section) PEXT - 2 (24" m/f Section) PEXT - 3 (36" m/f Section) PEXT - 4 (48" m/f Section)
E - Elbows	PEL-90MM (m/m 90° Elbow) PEL-90FF (f/f 90° Elbow) PEL-90FM (f/m 90° Elbow) PEL-45FM (f/m 45° Elbow)
F - Power Cord Harnesses:	EPVH10 -10 foot power cord and harness EPVH20 -20 foot power cord and harness EPVH30 -30 foot power cord and harness EPVH40 -40 foot power cord and harness EPVH50 -50 foot power cord and harness EPVH60 -60 foot power cord and harness EPVH70 -70 foot power cord and harness EPVH80 -80 foot power cord and harness EPVH90 -90 foot power cord and harness EPVH100 -100 foot power cord and harness

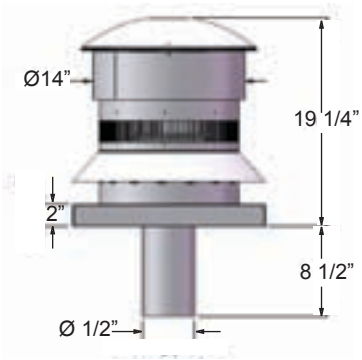
Connection and installation of the vent components should adhere to the following guidelines:

- Connect all vent sections using a minimum of three sheet metal screws on the outer pipe flue.
- Ensure the pipe ends male to female slide in a minimum of 1 1/2“ of overlap.
- Ensure all runs are supported with a minimum of 3 supports per 10’ of venting.
- When hanging/ supporting venting, ensure that 1” clearance is maintained on all sides to any combustible material.
- Ensure when cutting sections of rigid pipe to maintain integrity of internal supports.
- Place the springs, supplied with the pipe kit, between the outer and inner pipes to keep the pipes separate and avoid any possible hot spots.
- Montigo recommends the use of a flex section for the final pipe connected directly to the fireplace offering greater flexibility of installation and absorption of movement.
- All exterior joints in venting should be sealed with high heat silicone RV230.

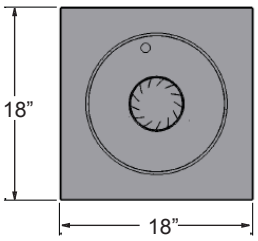
Section 3-1-3: Installation of the EDVRSPV58 External roof mounted power vent module.

Refer to Appendix A - Power Vent locations, to ensure the planned Vertical Power vent location is acceptable.

The EDVRSPV58 Power Vent dimensions:

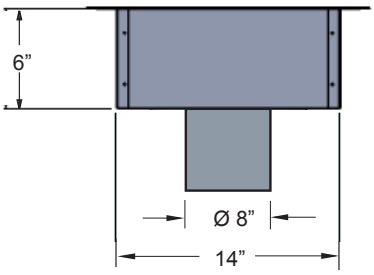


Front View

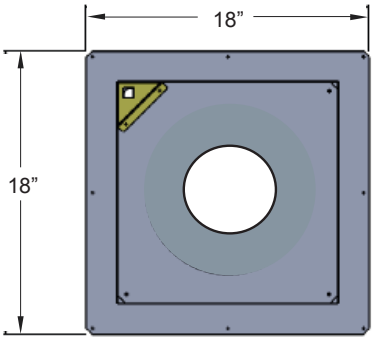


Top View

The EDVRSPV58F Rough-in Frame dimensions:



Front View



Top View

Installation

Installing the external roof mounted power vent module

Step 1. Construct a Vertical Chase for the termination opening to meet the following requirements:

- Opening Size must be: 14 1/2" x 14 1/2" x 18" Min. height.

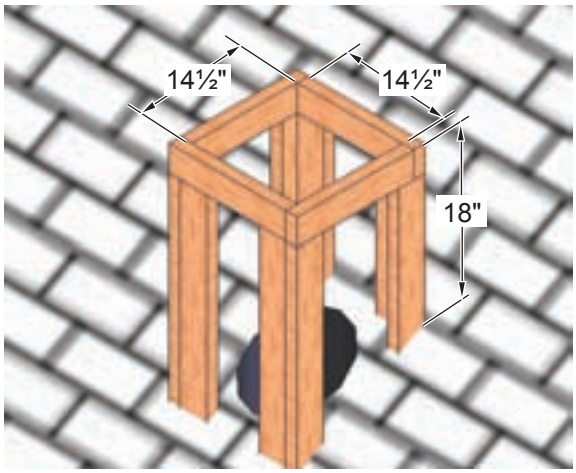


Figure 4. Construction, Rough-in framing.

Step 2. Install the Vent pipe female end up, and 2" to 3" MAX. from the top of the Constructed Chase. Also, at this point install the Electrical harness, (EPVH-(10-100) that will communicate with the Power Vent Module.

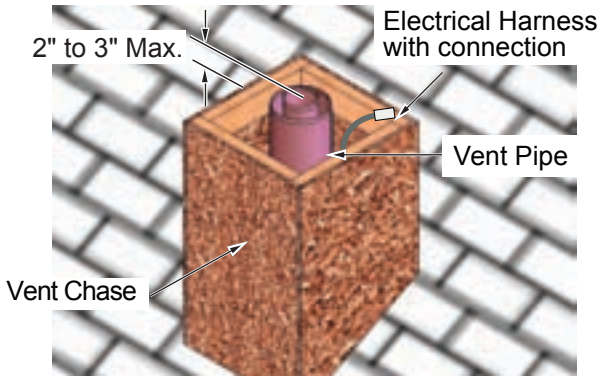


Figure 4a. Installation, Vertical Vent pipe. *(female end top end).*

Step 3. Install the Power Vent Rough-in Kit. Pull wire harness through the supplied hole in the bottom corner of the rough-in box, and snap into the slot provided, *(See **figure 4b** inset)*.

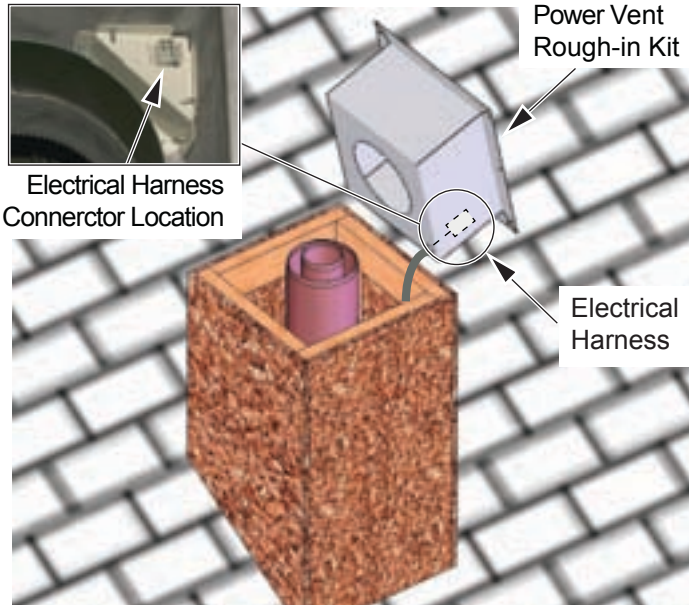


Figure 4b. Installation of Rough-in Kit

Step 4. Install fasteners around perimeter of Rough-in Kit. *(Holes supplied for ease of installation)*

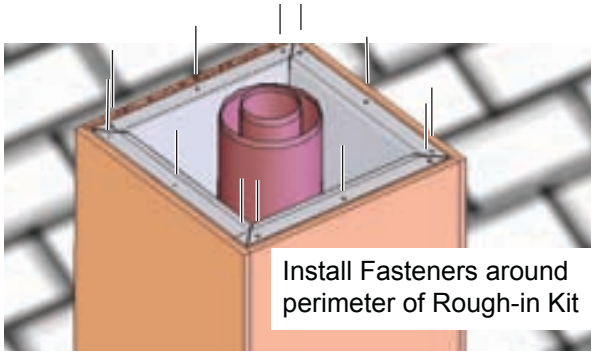


Figure 4c. (Fasten Rough-in Kit to framing)

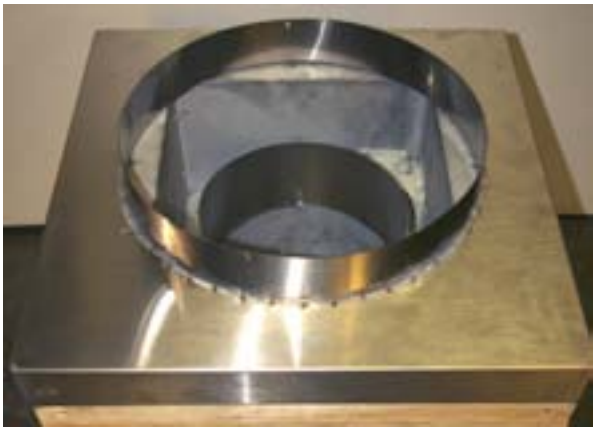


Figure 4d. (Installed Stainless steel cover)

WARNING

All venting material must be sealed with high heat silicone sealant RV230. All venting material to be Montigo flex pipe, with as few joints as possible. All joints use MVA vent splice, sealed thoroughly with silicone. Montigo will not be held responsible for any water damage that may occur from not installing the equipment as specified by this document.

XW2024

Installation

Step 5. Install the Power Vent, Roof-top Stainless steel cover over the Installed Rough-in Kit. (You can see the Electrical harness connector in the top right corner).

Figure 4e.

Figure 4f.

Step 6. Install the Power Vent Module Power / communication harness. Hold the Power Vent in close proximity of the assembled Chase, (with stainless steel cover attached) and plug in the Power Vent communication / Power Cord. (Note the direction and orientation of the plug socket). (See Figure 4e & Figure 4f)

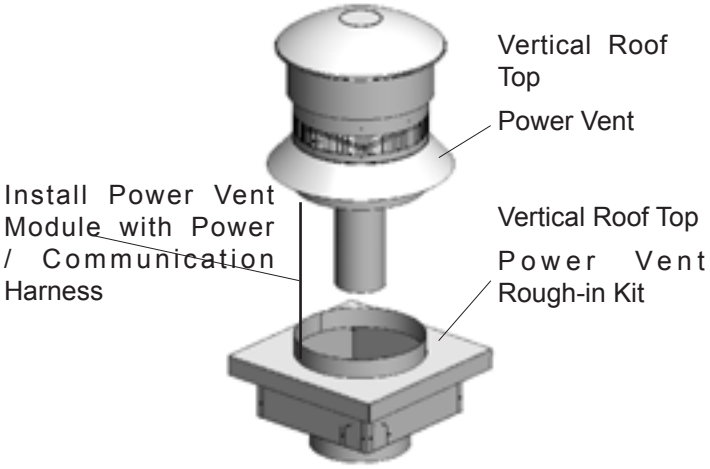

Vertical Roof Top
Power Vent
Install Power Vent Module with Power / Communication Harness
Vertical Roof Top
Power Vent Rough-in Kit

Figure 4g. (Installation of Power Vent Module)

Step 7. Install the Power Vent Module. Place the Power Vent Module over the stainless steel cover flange and vent pipe, aligning the Power Vent into final position. Ensure the Harness is placed down in the Rough-in box when placing the Power Vent Module into place. The Power Vent Module will sit flush with the stainless steel cover if installed correctly.

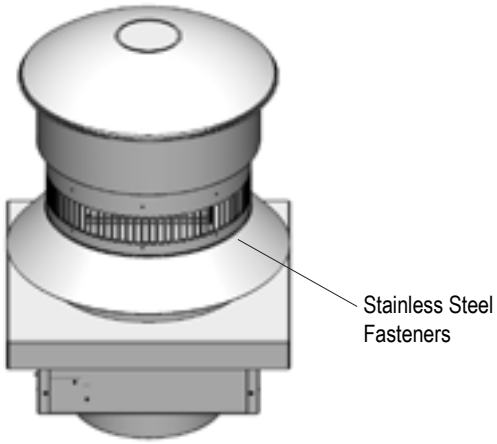
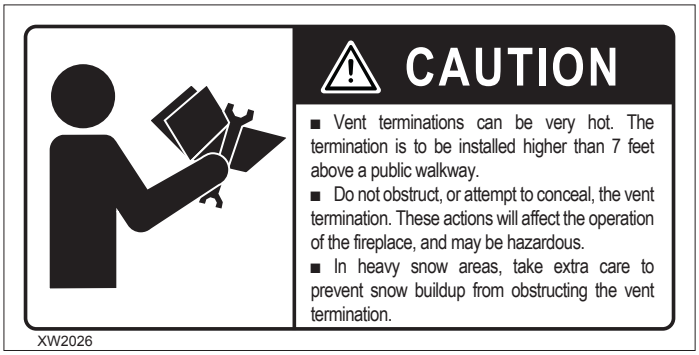


Figure 4h. (Installed Power Vent Module)

Step 8. Install (3) three stainless steel fasteners around Power Vent Module @120 degrees (penetrating through the inner stainless steel vent cover)


CAUTION
■ Vent terminations can be very hot. The termination is to be installed higher than 7 feet above a public walkway.
■ Do not obstruct, or attempt to conceal, the vent termination. These actions will affect the operation of the fireplace, and may be hazardous.
■ In heavy snow areas, take extra care to prevent snow buildup from obstructing the vent termination.
XW2026

Installation

Section 3-2: Installing a Wall Mounted Vertical Exterior Power Vent (EDVWSPV58)

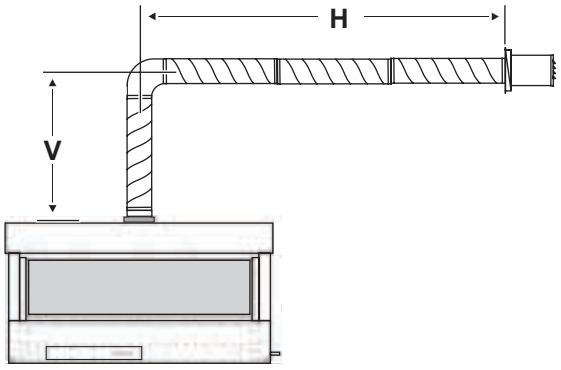
This section applies to installations where the shortest possible vent run is through an exterior wall. Refer to Appendix A - Power Vent locations, to ensure the planned Power vent location is acceptable. Once the vent location has been established, please refer to the appropriate section below for installation details.

Once the vent location has been established, please refer to the appropriate section below for installation details.

Section 3-2-1: Venting Layout

Selection of components and details of venting lay out should adhere to the following guidelines:

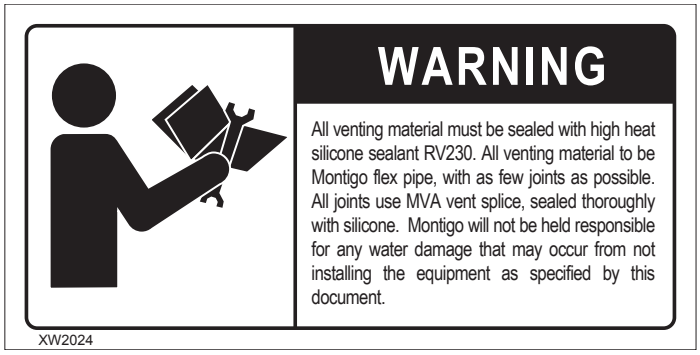
- Ensure there is a minimum run of 2' of straight pipe before the power vent.
- Ensure the maximum vent run does not exceed 100'.
- Ensure the number of 90° elbows does not exceed 6.
- Ensure the number of 45° elbows does not exceed 12.



Venting Installation

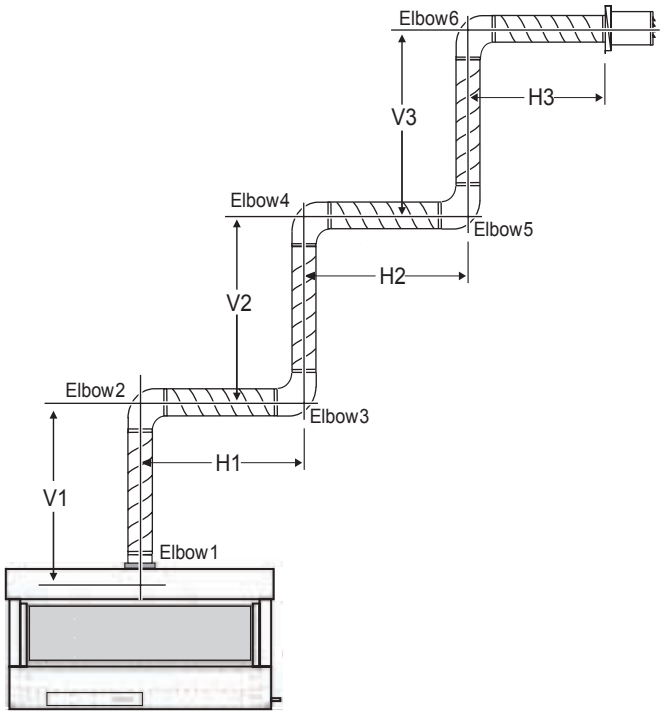
V + H (Maximum Length)	Max. # Elbows	Elbow Angle
100 Feet	6	90°

Figure 5. Typical Venting Installations.


WARNING
All venting material must be sealed with high heat silicone sealant RV230. All venting material to be Montigo flex pipe, with as few joints as possible. All joints use MVA vent splice, sealed thoroughly with silicone. Montigo will not be held responsible for any water damage that may occur from not installing the equipment as specified by this document.
XW2024

Multi-Elbow Installations

Multi-elbow installations are possible up to a maximum of six 90° elbows.



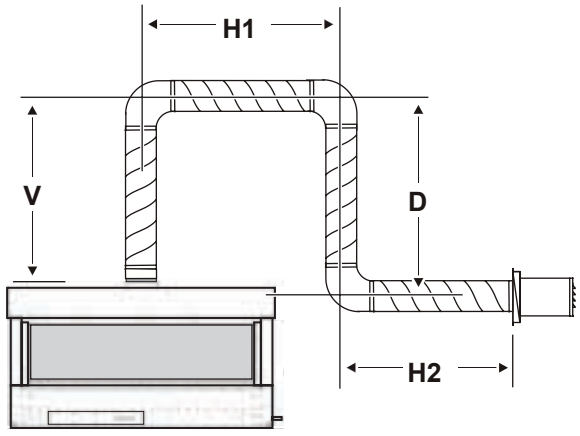
Multi Elbow - Venting Installation

V1 + H1 + V2 + H2 + V3 = H3 (Maximum Length)	Max. # Elbows	Elbow Angle
100 Feet	6	90°

Figure 5a. Multi-elbow Venting Installations.

Downward Vertical Venting

Note: The downward vent run must not exceed 6' of vent run.



Multi Elbow - Venting Installation

V1 + H1 + D + H2 (Maximum Length)	Max. # Elbows	Elbow Angle
40 Feet	6	90°

Figure 5b. Downward Venting Installations.

Installation

Venting Components

The following venting components and associated Montigo part numbers are available for the EDVWSPV58:

A - Termination	EDVWSPV58
B - Rough-in Frame	EDVWSPV58F
C - Flex Sections	PFL-1 (12" Section) PFL-2 (24" Section) PFL-3 (36" Section) PFL-4 (48" Section)
D - Rigid Sections	PEXT - 1 (12" m/f Section) PXT-20 (20" section) PEXT - 2 (24" m/f Section) PEXT - 3 (36" m/f Section) PEXT - 4 (48" m/f Section)
E - Elbows	PEL-90MM (m/m 90° Elbow) PEL-90FF (f/f 90° Elbow) PEL-90FM (f/m 90° Elbow) PEL-45FM (f/m 45° Elbow)
F - Power Cord Harnesses:	EPVH10 -10 foot power cord and harness EPVH20 -20 foot power cord and harness EPVH30 -30 foot power cord and harness EPVH40 -40 foot power cord and harness EPVH50 -50 foot power cord and harness EPVH60 -60 foot power cord and harness EPVH70 -70 foot power cord and harness EPVH80 -80 foot power cord and harness EPVH90 -90 foot power cord and harness EPVH100 -100 foot power cord and harness

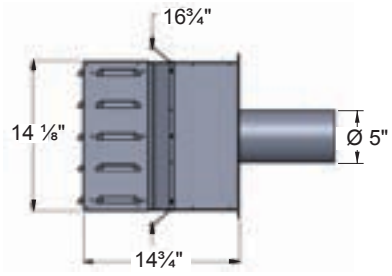
Connection and installation of the vent components should adhere to the following guidelines:

- Connect all vent sections using a minimum of three sheet metal screws on the outer pipe flue.
- Ensure the pipe ends male to female slide in a minimum of 1 1/2“ of overlap.
- Ensure all runs are supported with a minimum of 3 supports per 10’ of venting.
- When hanging/ supporting venting, ensure that 1” clearance is maintained on all sides to any combustible material.
- Ensure when cutting sections of rigid pipe to maintain integrity of internal supports.
- Place the springs, supplied with the pipe kit, between the outer and inner pipes to keep the pipes separate and avoid any possible hot spots.
- Montigo recommends the use of a flex section for the final pipe connected directly to the fireplace offering greater flexibility of installation and absorption of movement.
- All exterior joints in venting should be sealed with high heat silicone RV230.

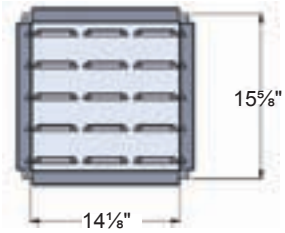
Installation of the EDVWSPV58 external wall mounted power vent module.

Refer to Appendix A - Power Vent locations, to ensure the planned Vertical Power vent location is acceptable.

The EDVWSPV58 Power Vent dimensions:

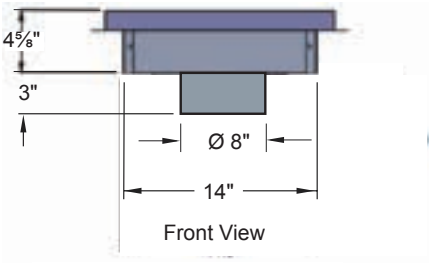


Side View

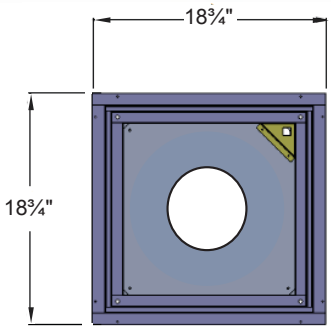


Front View

The EDVWSPV58F Rough-in Frame dimensions:



Front View



Top View

Installation

Installing the external wall mounted power vent module

Step 1. Construct a frame for the termination opening to meet the following requirements:

- Opening Size must be: 14 1/2" x 14 1/2".

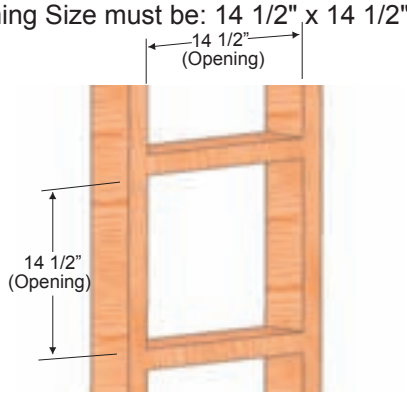


Figure 6. Framing the Opening for Power Vent

Step 2. Insert the Power Vent Rough-in Box as shown in Figure 6a. Fasten the Box securely in place with Screws or nails, Figure 6a. Apply exterior sheathing and finishing if required.

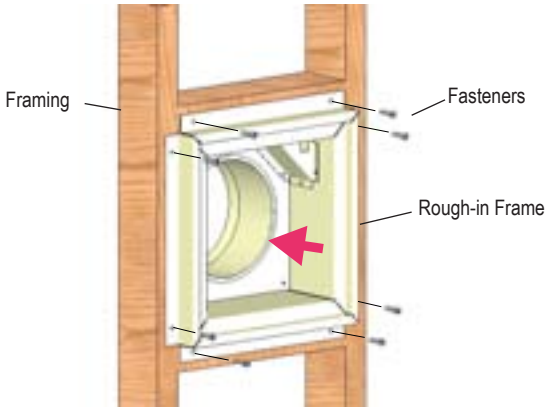


Figure 6a. Orientation, Placing the Power Vent Inner Box

Step 3. Next, remove the bottom collar and conduit mounting frame as shown Figure 6b. (Place removed hardware in a handy location for re-assembly).

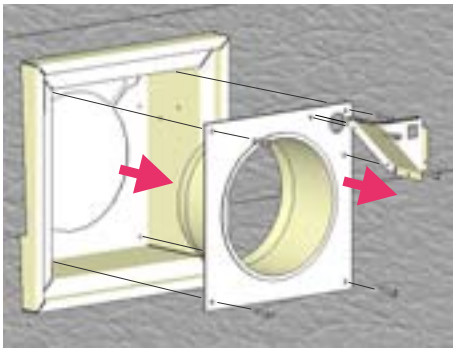


Figure 6b. Installation of Rough-in Kit

Step 4. Insert the conduit from the Power Vent Module into the rough-in frame through the two top right entry holes. Remove the nut from the supplied strain relief and place as shown, Figure 6c.

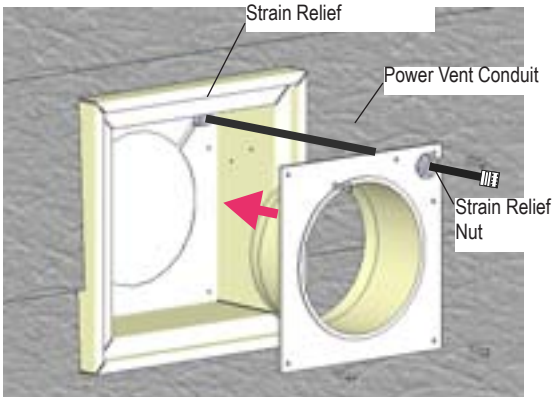


Figure 6c. Installation of Power Vent Conduit

Step 5. Securely fasten bottom Collar pan into the Rough-in frame using the existing hardware, (4-pcs). Tighten Strain Relief nut onto Strain relief.

Step 6. Pull Power Vent Connector, (from behind) half-way through supplied hole in conduit mounting frame, and snap into place, (notches in two plastic wing clips. Orientation not critical).

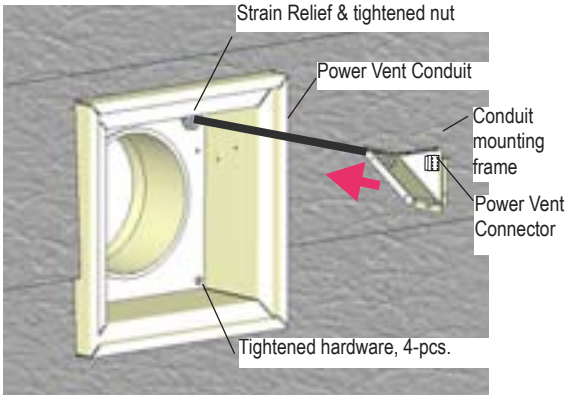


Figure 6d. (Installing Conduit connector & conduit mounting frame)

Step 7. Fasten Conduit mounting frame into place using existing hardware, (6-pcs). (Coil conduit in behind cover.)

Installation

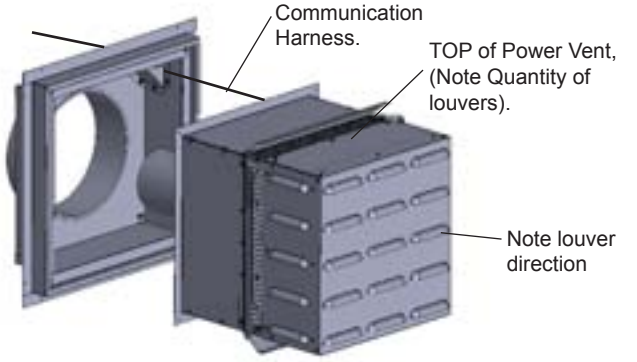


Figure 5f. *(Installation of Power Vent communication harness)*

Step 9. Install the Power Vent. Place the Power Vent into the Rough-in frame, aligning the Power Vent into final position. Ensure the Harness is placed down in the Rough-in box when placing the Power Vent. *(Secure the Power Vent in Place with the supplied hardware).*

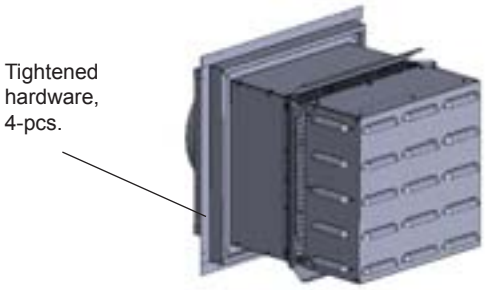


Figure 5g. *(Completed Installation of Power Vent)*

Converting to Top Vent / Rear Vent

All R-Series Residential are boxed and shipped as Top Vent fireplaces. Should your installation specifications require that you install your Vent system on the Rear of the fireplace, read the following instructions carefully.

1. Remove the eight machine screws that secure the 10" cover plate to the rear vent take off location of the fireplace. *(Ensure you do not damage the fibre gasket)*
2. Then, carefully Remove the 5" cover plate that is installed on the inner rear vent take off location. *(Ensure you do not damage the fibre gasket)*.
3. Now, remove the Top vent *(5" inner and 8" or 10" outer)* flue Collars. Switch the Collars and Cover plates as shown in, ***Figure 10***.

CAUTION!

When installing the Rear vent pressure sense tube, aim into the rear vent opening the same way as pictured in this installation, ***Figure 11***. A loose fitting of the flare nut will result in a malfunctioning or problematic fireplace installation.

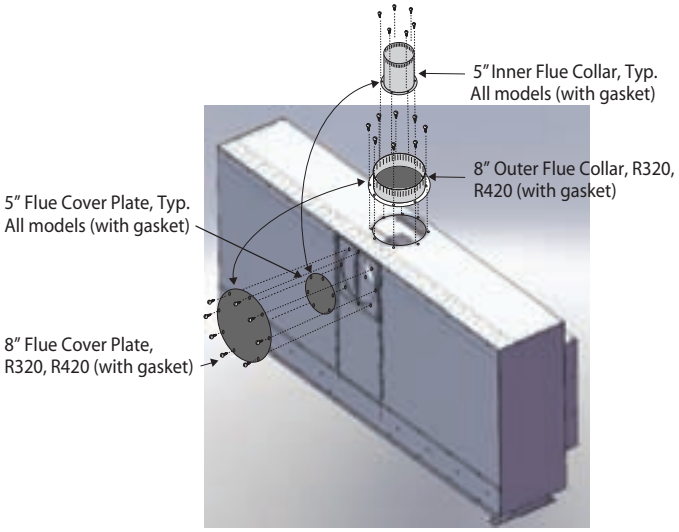

5" Inner Flue Collar, Typ. All models (with gasket)
8" Outer Flue Collar, R320, R420 (with gasket)
5" Flue Cover Plate, Typ. All models (with gasket)
8" Flue Cover Plate, R320, R420 (with gasket)

Figure 10. *Flue cap installation, Top Vented fireplace.*

Converting the Pressure Sensing tube from Top vent to Rear vent

All R-Series Residential are shipped as Top vent fireplaces. The fireplace will have installed a formed pressure sensing tube. This tube which is installed at the factory is manufactured from 1/4" aluminium tubing, ***Figure 11***. It will be required to remove the pre-installed 1/4" tube and Replace with the supplied Rear vent tube / part as described below.

Aim the pressure sensing tubing (Top Vent or Rear Vent) as shown in ***Figure 11*** to activate the control System. *(Oval below)*

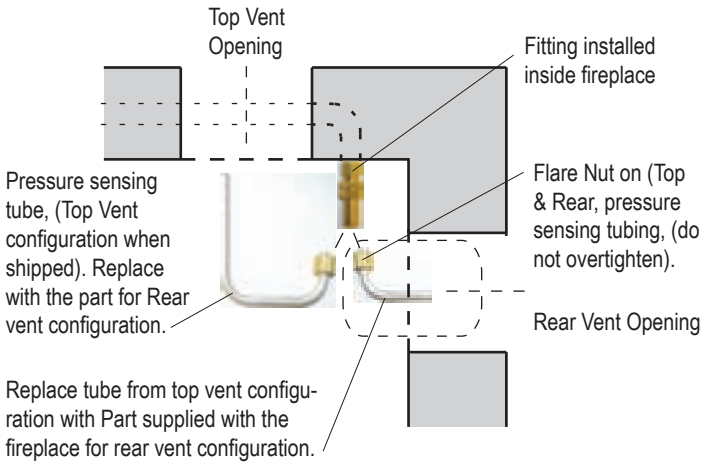

Top Vent Opening
Fitting installed inside fireplace
Pressure sensing tube, (Top Vent configuration when shipped). Replace with the part for Rear vent configuration.
Flare Nut on (Top & Rear, pressure sensing tubing, (do not overtighten).
Rear Vent Opening
Replace tube from top vent configuration with Part supplied with the fireplace for rear vent configuration.

Figure 11. *Fireplace Air Proving switch tubing configuration.*

Testing the System

The **R-Series Residential** Control and Power Vent System can be safely tested prior to finish framing the Fireplace. This test can be done quickly and efficiently to ensure all systems function according to the design specifications.

The fireplace should be installed on the rough-in frame, ***Figure 6a*** with the Power Vent Module and the Vent Termination connected.

Installation

Installation Of Electrical Supply

The R-Series Residential R320 & R420 Fireplaces are supplied with an external electrical Control Panel pre-wired by the factory. The power control box is connected to the fireplace with a 20 foot long 6 conductor cable that will communicate with the fireplace. The control panel should be located in a location that would be accessible when the fireplace in finished.

Figure 8. (Fireplace to Control Panel Harness)

The power cord from the power vent module pugs into the side of this panel. A 20 foot low voltage wire is attached and connected to this panel as well. Connect a single pole On/Off switch (Black and White) to these two wires at a location of your choice, (See Installing the Remote Switch).

Installations in Canada must be electrically grounded in accordance with CSA C22.1 Canadian Electrical Code Part 1 and/or Local Codes.

Installations in the USA must be electrically grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70-1987.

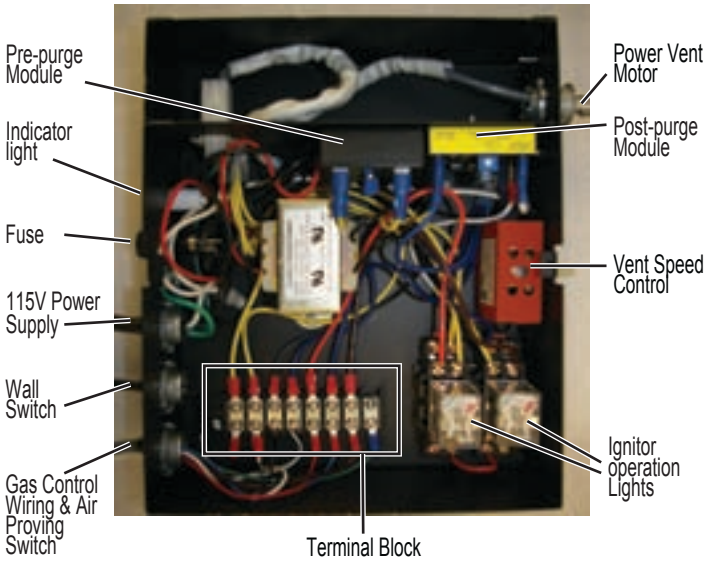


Figure 9. (Control Panel Overview)

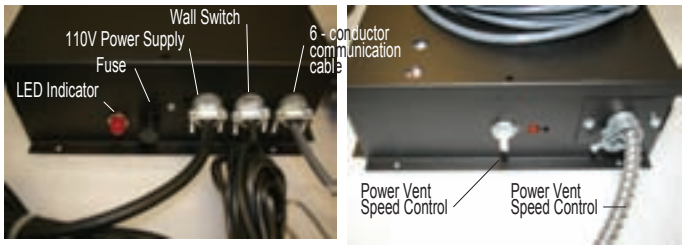


Figure 10. R-Series Residential Power Vent Module

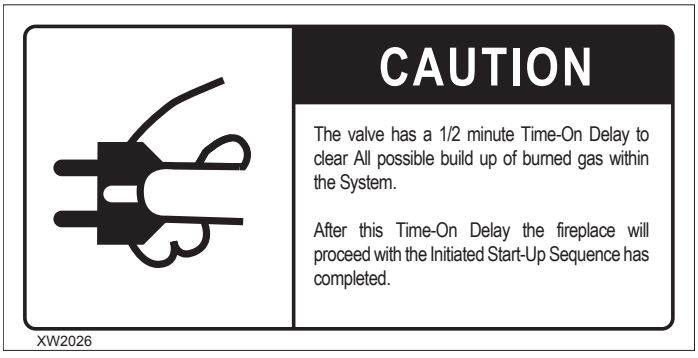
Installing The Remote Switch

The **R-Series Residential R320** & **R420** Fireplaces may be connected to a wall switch or a hand-held remote. The valve operates on a **24V circuit. DO NOT** connect the gas

Figure 11. (Remote Switch Wire connection)

valve to an external circuit.

The external electrical panel supplied with the fireplace is equipped with a 20 foot low voltage wire, for connecting to a wall switch of your choice. Should you require a longer switch wire, replace this wire to any length with a wire of equal quality. Additional length are available upon request.


CAUTION
The valve has a 1/2 minute Time-On Delay to clear All possible build up of burned gas within the System.
After this Time-On Delay the fireplace will proceed with the Initiated Start-Up Sequence has completed.
XW2026

Installation

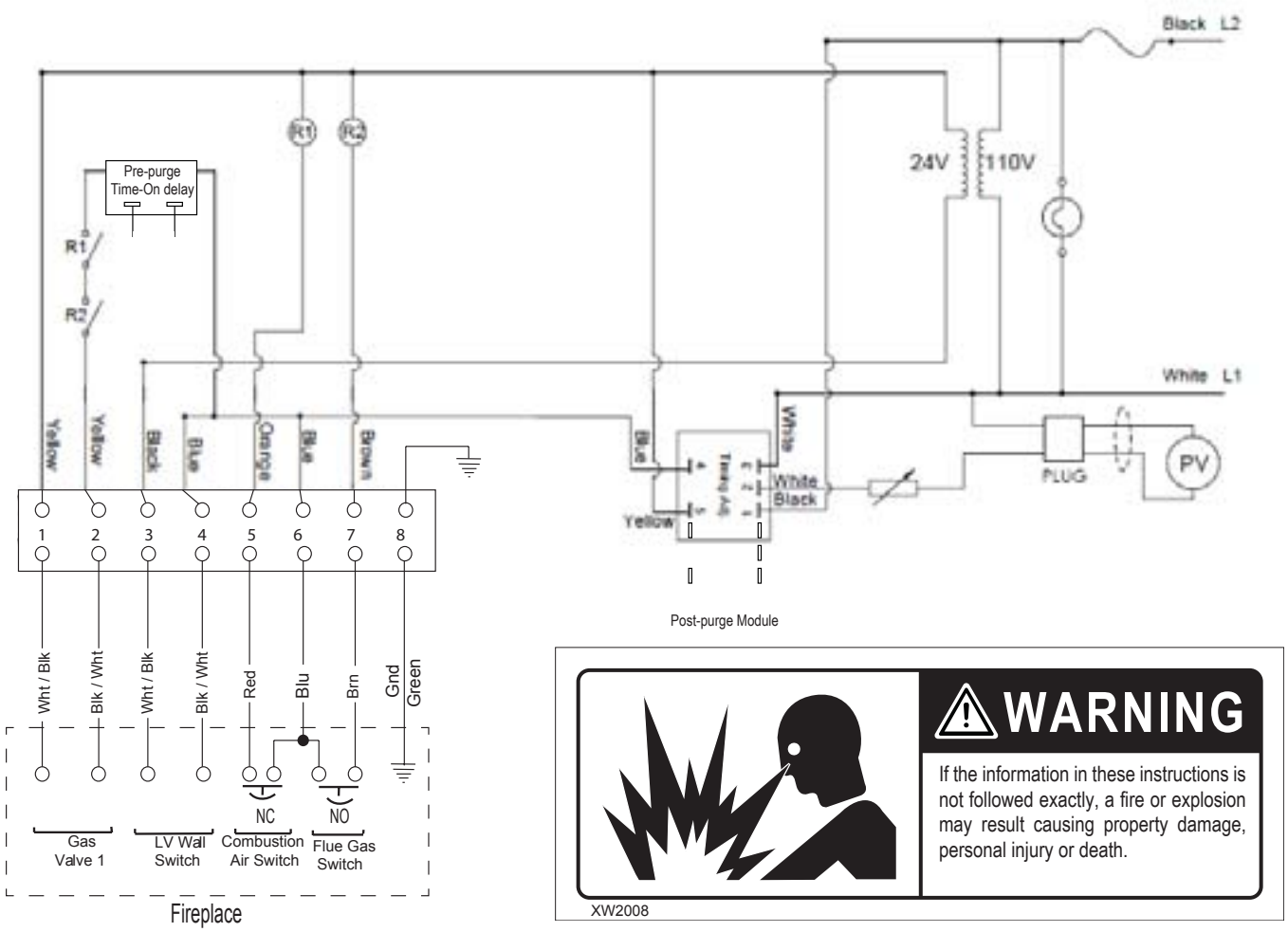


Figure 21. R-Series Residential Wiring Schematic

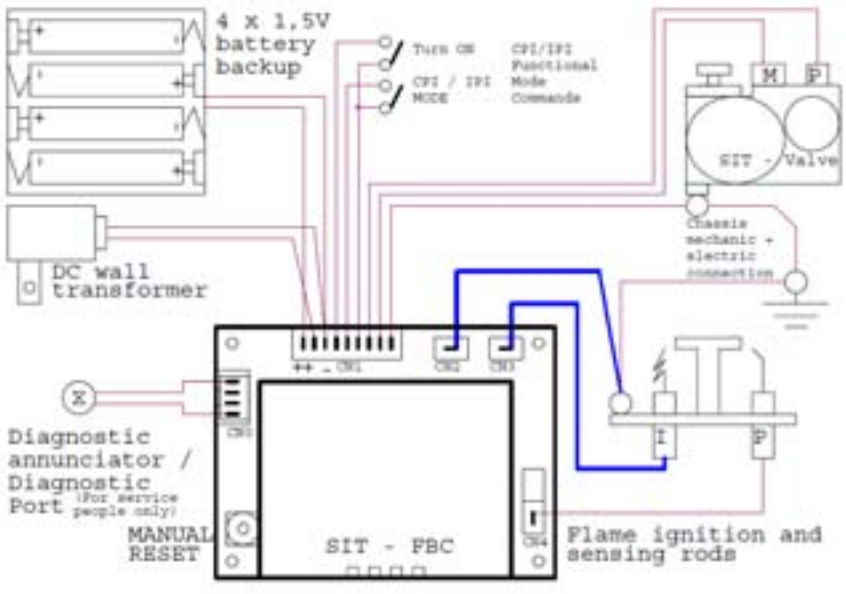


Figure 21a. R-Series Residential SIT IPI Wiring Schematic

Installation

Fuel Consumption

Verify that your fireplace is compatible with your available gas type. (Natural Gas or Propane shown by "N" or "L" in your model number

If gas type is not compatible, contact your local Montigo representative to purchase a conversion kit.

Conversion kits must be installed by a qualified service technician.

Gas Pressure

Optimum appliance performance requires proper input pressures.

Gas line sizing requirements will be determined in ANSI Z221.3 National Fuel Gas Code in the USA and CAN/CGA B149 in Canada.

Pressure requirements:

Pressure Requirements		
Gas Pressure	Natural Gas	Propane
Minimum Inlet Pressure	5.5" W.C.	11" W.C.
Manifold Presure	3.5" W.C.	10" W.C.

The manifold outlet pressure is set from the factory to the appropriate pressure but should be verified.

To check pressures, control valves have a provision to remove a 1/8” N.PT. plug to be fitted with a hose barb.

Montigo requires a service shut off valve be located in an accessible location to isolate the gas supply.

Only install gas shut-off valves approved for use by the state, province, or other governing body in which the fireplace is being installed.

GAS CONNECTION

See Figure 14 below for location of gas line access.

Flexible gas connectors must not exceed 3 feet in length, unless allowable within local regulations.

Connect incoming gas line to the 1/2"or 3/8" gas inlet port.

Purge all air out of gas line.

Check appliance connection, valve and valve train under normal operating pressure with a commercially available leak check solution.

DO NOT USE A FLAME OF ANY KIND TO TEST FOR LEAKS.

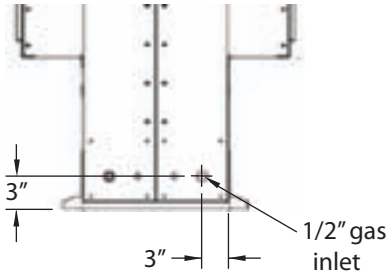
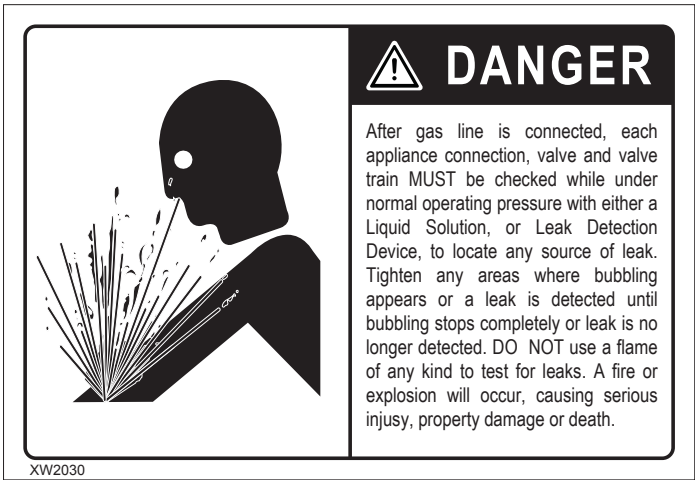
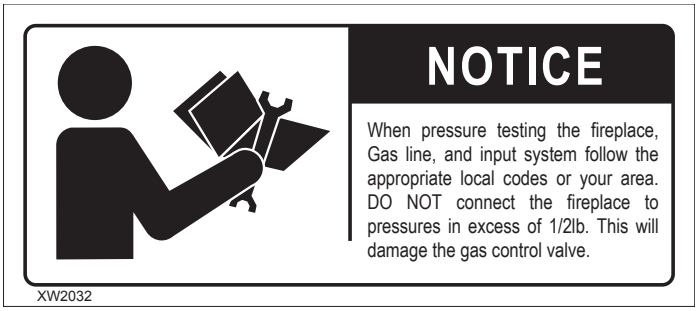


Figure 14. Gas Inlet Supply location, *(Right-hand side of fireplace).*


DANGER
After gas line is connected, each appliance connection, valve and valve train MUST be checked while under normal operating pressure with either a Liquid Solution, or Leak Detection Device, to locate any source of leak. Tighten any areas where bubbling appears or a leak is detected until bubbling stops completely or leak is no longer detected. DO NOT use a flame of any kind to test for leaks. A fire or explosion will occur, causing serious injusy, property damage or death.
XW2030


NOTICE
When pressure testing the fireplace, Gas line, and input system follow the appropriate local codes or your area. DO NOT connect the fireplace to pressures in excess of 1/2lb. This will damage the gas control valve.
XW2032

Installation

Section 6: Finishing

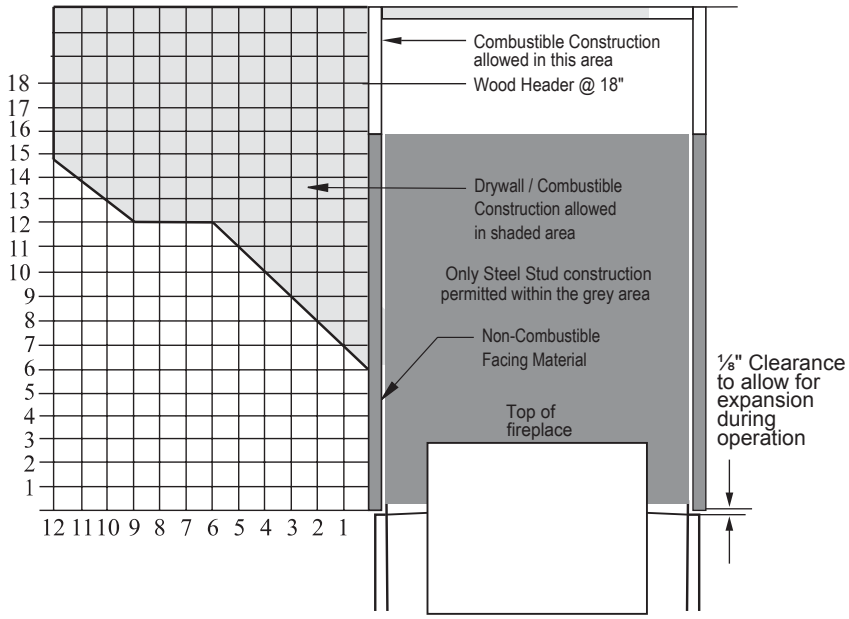

Combustible Construction allowed in this area
Wood Header @ 18"
Drywall / Combustible Construction allowed in shaded area
Only Steel Stud construction permitted within the grey area
Non-Combustible Facing Material
Top of fireplace
⅛" Clearance to allow for expansion during operation
18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
12 11 10 9 8 7 6 5 4 3 2 1

Figure 16. Combustible mantles and facings. (Not to scale)

Fireplace Facing

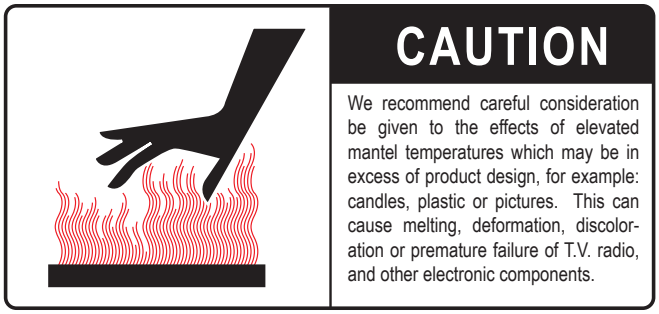
When selecting the finish material for your fireplace, it is important to remember the following:

If the surround of the fireplace is to be painted to match the room decor, heat-resistant paint must be provided . Also, decorative facing must not extend past the fireplace opening at all, because it will interfere with the access to retainers for removal of glass door and access to the lower compartment.

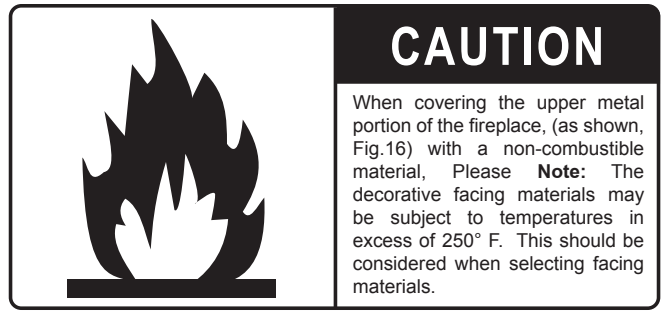
Mantels & Surrounds

National Canadian Gas Association mantel test requirements are for fire hazard prevention to combustible materials.

Please be aware; temperatures over the mantel will rise above normal room temperature and walls above fireplace may be hot to touch.


CAUTION
We recommend careful consideration be given to the effects of elevated mantel temperatures which may be in excess of product design, for example: candles, plastic or pictures. This can cause melting, deformation, discoloration or premature failure of T.V. radio, and other electronic components.

XW2034


CAUTION
When covering the upper metal portion of the fireplace, (as shown, Fig.16) with a non-combustible material, Please **Note:** The decorative facing materials may be subject to temperatures in excess of 250° F. This should be considered when selecting facing materials.

XW2036

Installation

Section 7:Removing & Installing the Door

Removing the doors:

The doors are removed in a few simple steps.

Follow the steps below to remove the Vertical Door trim, place the Door removal tool, and then remove the door. Replace all the parts in reverse order.

Step 1. Remove the two (2) Vertical Trim pieces, (LH & RH). Pulling firmly with your fingers, remove from the bottom then the top. (See Figures 17 & 17a). Other side Typical.

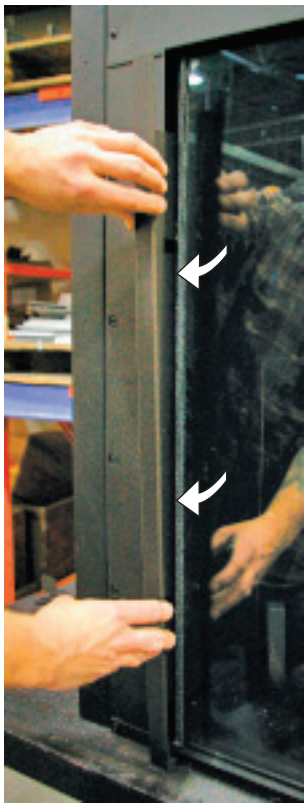


Figure 17. (Remove LH Trim)

Figure 17a. (Remove RH Trim)

Step 2. Remove the supplied glass lifting tool from the packaging. Place in the center of the Glass door as shown, and activate the suction feature of the tool, Figure 17b. NOTE: Read ALL the instruction supplied with the tool, and follow the associated operating procedures.

Figure 17b. Supplied Glass lifting tools

Step 3. Hold the Glass Removal Tools firmly, Lift the door upward, into the top door frame, Figure 17c. Then pull the bottom of the glass door downward, and tilt outward from the bottom fireplace door frame. Figure 17d. NOTE: Read ALL the instruction supplied with the tool, and follow the associated operating procedures.

Figure 17c. (Lift the door upward)

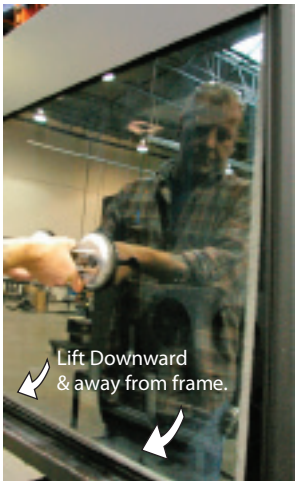


Figure 17d. (Lift the bottom of the door outward).

Figure 17e.

Step 4. Still holding the Glass Removal Tool firmly, remove the door outward, and away from the Fireplace, Figure 17e.

Step 5. Place the door in a safe location while maintenance, cleaning or other operation are in progress.

NOTE: Read ALL the instruction supplied with the tool, and follow the associated operating procedures.

Step 6. To replace, See **Installing the Door, Below.**

Installing the Door:

To install the door, follow Steps 1 and 4 above, (*in reverse order*). Hook the top edge of the door frame into place. Lower and rest the door frame in place and fasten the buckles. See figures 28a and 28b.

NOTICE

Do not use ammonia based or abrasive cleaners on the glass, they will permanently etch the surface. Use an approved gas fireplace glass cleaner such as Kel-Kem or White off.

XW2000

Installation

Section 8: Installing the Firestones

The R-Series Residential R320 & R420 fireplace have the option of installing the supplied glass Firestones or other optional colored glass media, or cultured rocks.

Note: The designer Firestones or cultured rocks cannot cover the burners, doing so produces an undesirable / uneven flame pattern and eventual sooting.

Firestones

The R-Series Residential R320 & R420 fireplace are supplied with a quantity of Glass Firestones. To install the Firestones remove the Door and trim as shown in the previous Instruction. Follow these instructions to ensure all parts are removed or replaced as required. Once the Trim and glass doors are removed place the firestones randomly around the burners as shown in Figures 19 and 19a.

Note: DO NOT cover the burners with designer Firestones or Optional Rocks.

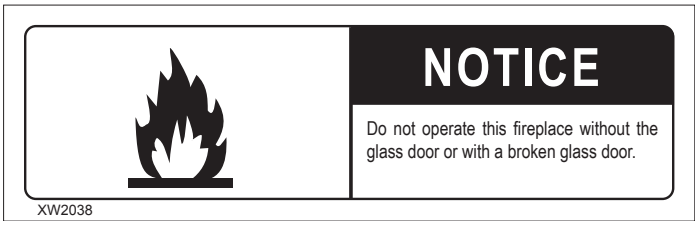
Figure 19. Completed glass Firestone installation. (Note: DO NOT place glass Firestones on top of mesh pilot cover to complete the installation.

Figure 19a. Operating Propane gas fireplace with designer glass Firestones surrounding burner tray.

Optional River Rocks

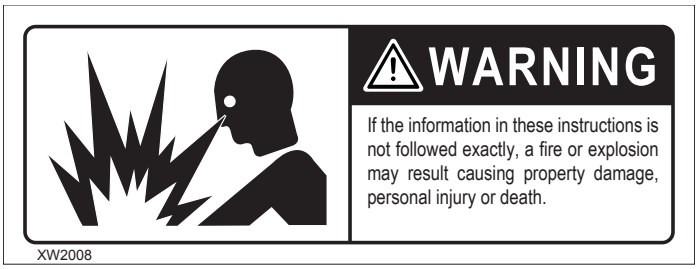
The R-Series Residential fireplace has the option of installing the cultured rocks which mimic real stone. These may be spaced at random, or in a visual pattern of your preference. See the Montigo web site for photographs and ideas.

www.montigo.com



Operation

Section 9: Start-up Sequence


WARNING
If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.
XW2008

STARTUP SEQUENCE:

1) Turn the wall switch ON

2) The blowers will start and within 10 seconds the glow plugs will start to glow

3) If the pilot does not light the gas valves will turn the glow plugs off after 20 seconds

4) This may need to be done three or four times to bleed all of the air out of the gas lines within the fireplace

5) Turning the switch OFF and then ON again will reset this start up sequence

6) Once the pilots are burning the main burner will turn on and the fireplace will be functional for a quick start up on next use.

CAUTION
■ This fireplace has been set up at the factory for a determined air volume though the venting system.
■ This fireplace will not operate unless the correct air movement is detected by our control system..
■ Please consulted with your contact person at Montigo should you have any problems with your start up.
XW2040

Operation

Honeywell Intermittent Pilot

FOR YOUR SAFETY - READ BEFORE LIGHTING:

A. This appliance is equipped with an ignition system that lights the pilot burner automatically. Do not attempt to light the pilot by hand.

B. **BEFORE LIGHTING** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

What To Do If You Smell Gas:

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbour's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the Fire Department.

C. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system, and any gas control which has been under water.

Maintenance

Section 10: Cleaning and Maintenance

Lighting Instructions *See pages 24*

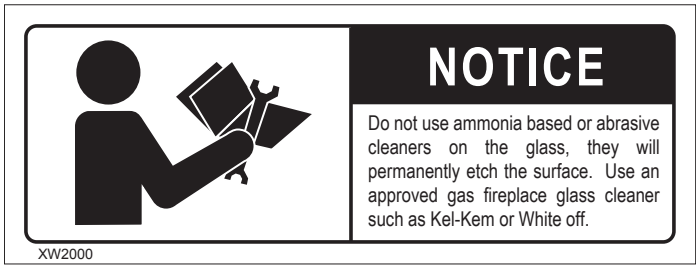
General

- **Have the fireplace and installation inspected yearly**. The inspection must include, but is not limited to, the following:
  - A visual check of the entire vent system and termination.
  - An inspection of the explosion relief flappers and the door gaskets to ensure a proper seal.
  - An inspection of the burner, vent run, and primary air openings.
  - An inspection of the gas valve, gas components, and pilot flame. For your convenience a 1/8" manifold pressure tap is supplied on the gas valve for a test gauge connection.
  - Ensure proper log placement as per this manual.
  - Inspection of all optional equipment; fans, thermostats, etc.
- For **Natural Gas** this appliance requires a minimum inlet pressure of 5.5" W.C. and a manifold pressure of 3.5" W.C.
- For **Propane Gas** this appliance requires a minimum inlet pressure of 11" W.C. and a manifold pressure of 10" W.C.
- Always keep the fireplace area clear and free of combustible materials, as well as gasoline and other flammable vapors and liquids.
- Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

Cleaning

When the fireplace is first activated, there may be some smoking and a visible film may be left on the glass. This is a normal condition, and is the result of burning of protective coatings on new metal.

- Glass must be cleaned periodically to remove any film (which is a normal by-product of combustion) which may be visible. Film can easily be removed by removing the door, as shown on Page 22. Handle the door carefully, and clean it with non-abrasive glass cleaners. One of the most effective products is Kel Kem.
- Silicone seals on inner door during initial firing will "off gas", leaving a visual deposit of a white substance on combustion chamber walls. This can easily be removed using normal household products.
- Use a vacuum cleaner or whisk broom to keep the control compartment, burner, and firebox free from dust and lint.


NOTICE
Do not use ammonia based or abrasive cleaners on the glass, they will permanently etch the surface. Use an approved gas fireplace glass cleaner such as Kel-Kem or White off.
XW2000

Gas Control Valve

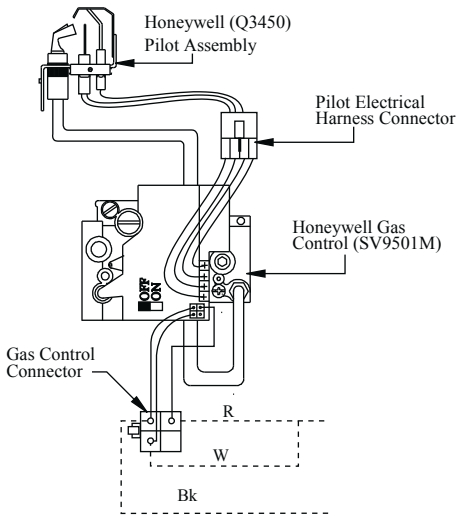
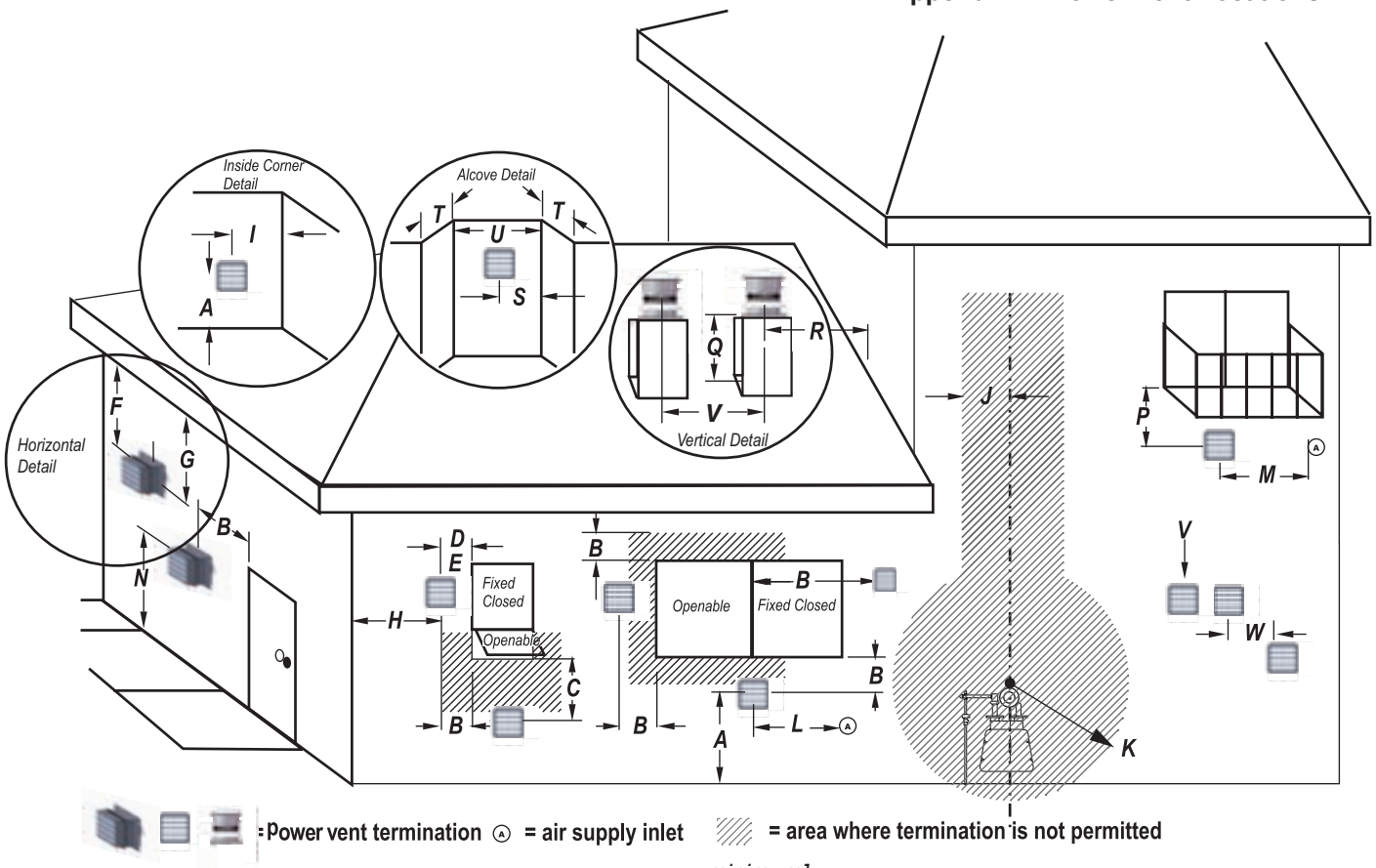


Figure 32. Gas valve.

Appendix

Appendix A: Power Vent Locations



= Power vent termination Ⓐ = air supply inlet = area where termination is not permitted

A = *clearance to the termination frame above grade, veranda, porch, deck, or balcony [30 inches (75 cm) minimum]*

B = *clearance to door, or sides and top of window, that may be opened [30 inches (75 cm) minimum for appliances.*

C = *clearance to bottom of window that may be opened horizontally [36 inches (92 cm) minimum for appliances.*

D = *no clearance to permanently closed window when installed with approved glass penetration termination*

E = *clearance to permanently closed window [30 inches 75 cm recommended to prevent condensation on window]*

F = *vertical clearance to ventilated soffit located above the termination within a horizontal distance of [30 inches 75 cm] from the centreline of the termination [30 inches (75 cm) minimum]*

G = *clearance to unventilated soffit [30 inches (75 cm) minimum to non-combustibles] [30 inches (75 cm) minimum to combustibles]*

H = *clearance to outside corner [30 inches (75 cm) minimum]*

I = *clearance to inside corner [30 inches (75 cm) minimum]*

J = ** not to be installed above a meter/regulator assembly within 40" (103 cm) horizontally from the centerline of the regulator*

K = *clearance to service regulator vent outlet [3 feet minimum in the United States] [*6 feet (1.8 m) minimum in Canada]*

L = *clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance [16 inches (41 cm) minimum for appliances ≤100 000 BTU/H (30kW)]*

M = *clearance to mechanical air supply inlet [*6 feet (1.8 m) minimum]*

N = *† clearance above paved sidewalk or a paved driveway located on public property [*7 feet (2.1 m) minimum]*

P = *clearance under veranda, porch, deck, or balcony [30 inches (75 cm) minimum‡ to non-combustibles] [30 inches (75 cm) minimum‡ to combustibles]*

Q = *clearance above a roof [18 inches (46 cm) minimum]*

R = *clearance to adjacent walls and neighboring buildings [30 inches (75 cm) minimum]*

S = *clearance from corner in recessed location [30 inches (75 cm) minimum]*

T = *maximum depth in recessed location [48 inches (122 cm) minimum]*

U = *minimum width for back wall of recessed location [60 inches (150 cm) minimum]*

V = *minimum horizontal clearance between the frames of two terminations that are level, (see applicable Detail).*

W = *horizontal clearance between the frames of two terminations that are not level. [30 inches (75 cm) minimum]*

† *a vent shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings*

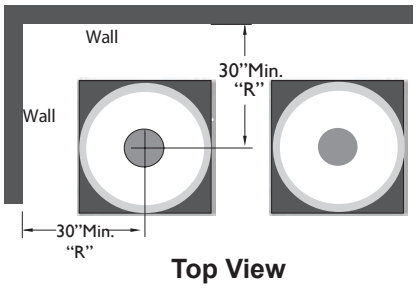
‡ *only permitted if veranda, porch, deck, or balcony has an open side that is equal to or greater than the depth of the enclosed area*

* *as specified in CGA B149 Installation Codes. Note: local Codes or Regulations may require different clearance.*

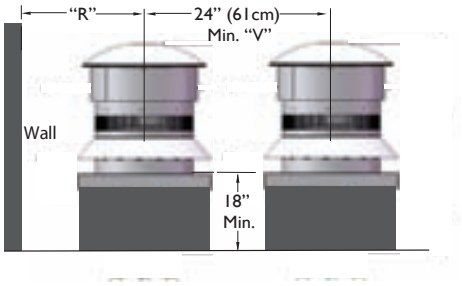
Appendix

Appendix A: Pow er Vent Locations

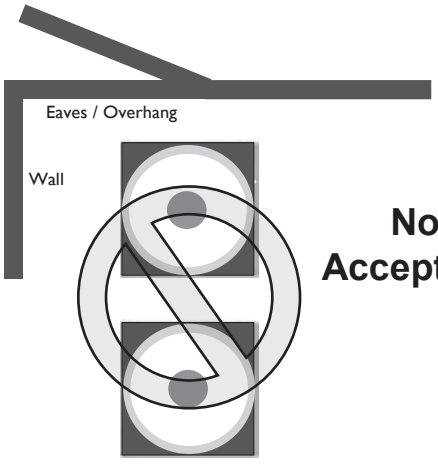
EDVRSPV58 Vertical Power Vent Detail



Top View

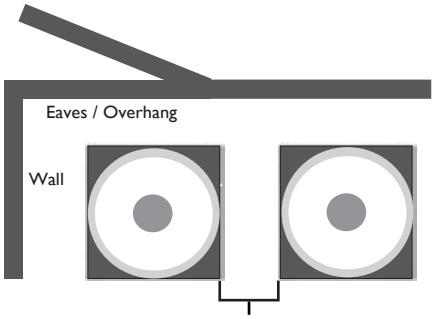


Front View



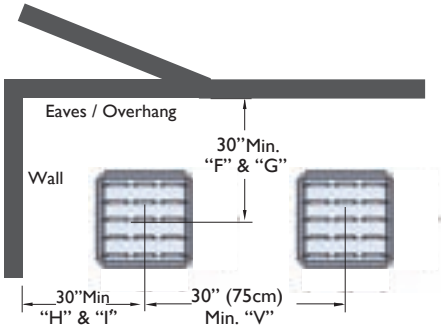
Not Acceptable

Front View



Front View

EDVWSPV58 Horizontal Power Vent Detail



Front View

Appendix

Appendix B: Warranty

The Warranty

The Companies warrants the Montigo Gas Appliance to be free from defects in materials and workmanship at the time of manufacture. On the Montigo fireplace, there is a ten-year warranty on the firebox and its components, a five-year warranty on the main burner and pilot burner, and a one-year warranty on the gas control valve, fibre logs and Power Vent Module. The Glass, plated / painted finishes, and refractory lining are exempt from the warranty.

Remedy And Exclusions

The coverage of this Warranty is limited to all components of the Gas Appliance manufactured by The Companies.

This Warranty only covers Montigo Gas Appliances installed in the United States or Canada.

If the components of the Gas Appliance covered by this Warranty are found to be defective within the time frame stated (see The Companies right of investigation outlined below). The Companies will, at its option, replace or repair defective components of the Gas Appliance manufactured by The Companies at no charge, and will also pay for reasonable labour costs incurred in replacing or repairing components. If repair or replacement is not commercially practical, The Companies will, at its option, refund the purchase price of the Montigo Gas Appliance.

This Warranty covers only parts and labour as provided above. In no case shall The Companies be responsible for materials, components, or construction which are not manufactured or supplied by The Companies, or for the labour necessary to install, repair or remove such materials, components or construction. All replacement or repair components will be shipped F.O.B. the nearest The Companies factory.

Qualifications To The Warranty

The Gas Appliance Warranty outlined above is further subject to the following qualifications:

(1) The Gas Appliance must be installed in accordance with The Companies installation instructions and local building codes. The Warranty on this Montigo Gas Appliance covers only the component parts manufactured by The Companies. The use of components manufactured by others with this Montigo Gas Appliance could create serious safety hazards, may result in the denial of certification by recognized national safety agencies, and could be in violation of local building codes. This warranty does not cover any damages occurring from the use of any components not manufactured or supplied by The Companies

(2) The Montigo Gas Appliance must be subjected to normal use. The Gas Appliances are designed to burn gas only. Burning conventional fireplace fuels such as wood, coal or any other solid fuel will cause damage to the Gas Appliance, will produce excessive temperatures and will result in a fire hazard.

Limitations On Liability

It is expressly agreed and understood that The Companies sole obligation, and purchaser's exclusive remedy under this Warranty, under any other warranty, expressed or implied, or in contract, tort or otherwise, shall be limited to replacement, repair, or refund, as specified above.

In no event shall The Companies be responsible for any incidental or consequential damages caused by defects in its products, whether such damage occurs or is discovered before or after replacement or repair, and whether or not such damage is caused by The Companies negligence. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. The duration of any implied warranty with respect to this Montigo Gas Appliance is limited to the duration of the foregoing warranty. Some states do not allow limitation on how long an implied warranty lasts, so the above may not apply to you.

Investigation Of Claims Against Warranty

The Companies reserves the right to investigate any and all claims against this Warranty and to decide upon method of settlement.

The Companies Are Not Responsible For Work Done Without Written Consent

The Companies shall in no event be responsible for any warranty work done without first obtaining The Companies written consent.

Dealers Have No Authority To Alter This Warranty

The Companies employees and dealers have no authority to make any warranties nor to authorize any remedies in addition to or inconsistent with those stated above.

How To Register A Claim Against Warranty

In order for any claim under this Warranty to be valid, The Companies must be notified of the claimed defect in writing or by telephone, as soon as reasonably possible after the defect is discovered. Claims against this Warranty in writing should include the date of installation, and a description of the defect.

Other Rights

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

NOTE: *The Companies* as stated above refer to - Canadian Heating Products Inc. and/or Montigo Del Ray Corp.

Canadian Heating Products Inc. and/or Montigo DelRay Corp. reserves the right to make changes at any time, without notice, in design, materials, specifications, prices and also to discontinue colors, styles and products.

Appendix

Appendix C: State of Massachusetts

Amendment

(Gas Fireplace / Equipment sold in the State of Massachusetts)
5.08: Modifications to NFPA-54, Chapter 10

(1) Revise NFPA-54 section 10.5.4.2 by adding a second exception as follows:
Existing chimneys shall be permitted to have their use continued when a gas conversion burner is installed, and shall be equipped with a manually reset device that will automatically shut off the gas to the burner in the event of a sustained back-draft.

(2) Revise 10.8.3 by adding the following additional requirements:
(a) For all side wall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than seven (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

1. INSTALLATION OF CARBON MONOXIDE DETECTORS. At the time of installation of the side wall horizontal vented gas fueled equipment, the installing plumber or gas fitter shall observe that a hard wired carbon monoxide detector with an alarm and battery back-up is installed on the floor level where the gas equipment is to be installed. In addition, the installing plumber or gas fitter shall observe that a battery operated or hard wired carbon monoxide detector with an alarm is installed on each additional level of the dwelling, building or structure served by the side wall horizontal vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors
a. In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.
b. In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

2. APPROVED CARBON MONOXIDE DETECTORS. Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and be ANSI/UL 2034 listed and IAS certified.

3. SIGNAGE. A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print size no less than one-half (1/2) inch in size, “GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS”.

4. INSPECTION. The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08(2)(a)1 through 4.
(b) EXEMPTIONS: The following equipment is exempt from 248 CMR 5.08(2)(a)1 through 4:

1. The equipment listed in Chapter 10 entitled “Equipment Not Required To Be Vented” in the most current edition of NFPA 54 as adopted by the Board; and
2. Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

(c) MANUFACTURER REQUIREMENTS - GAS EQUIPMENT VENTING SYSTEM PROVIDED. When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:
1. Detailed instructions for the installation of the venting system design or the venting system components; and
2. A complete parts list for the venting system design or venting system.

(d) MANUFACTURER REQUIREMENTS - GAS EQUIPMENT VENTING SYSTEM NOT PROVIDED. When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies “special venting systems”, the following requirements shall be satisfied by the manufacturer:
1. The referenced “special venting system” instructions shall be included with the appliance or equipment installation instructions; and
2. The “special venting systems” shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.
(e) A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design instructions shall remain with the appliance or equipment at the completion of the installation.

(3) After NFPA-54 section 10.10.4.2 add a new section 10.10.4.3 as follows:
When more than four gas appliances are to be vented through a common gas vent or common horizontal vent manifold, a plan of the proposed vent installation shall be submitted to the Inspector and the serving gas supplier for review and approval.

Extraction from: Massachusets Rules and Regulations
5.00: Amendments To 2002 Edition Of ANSI Z223.1-NFPA-54

Notes

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